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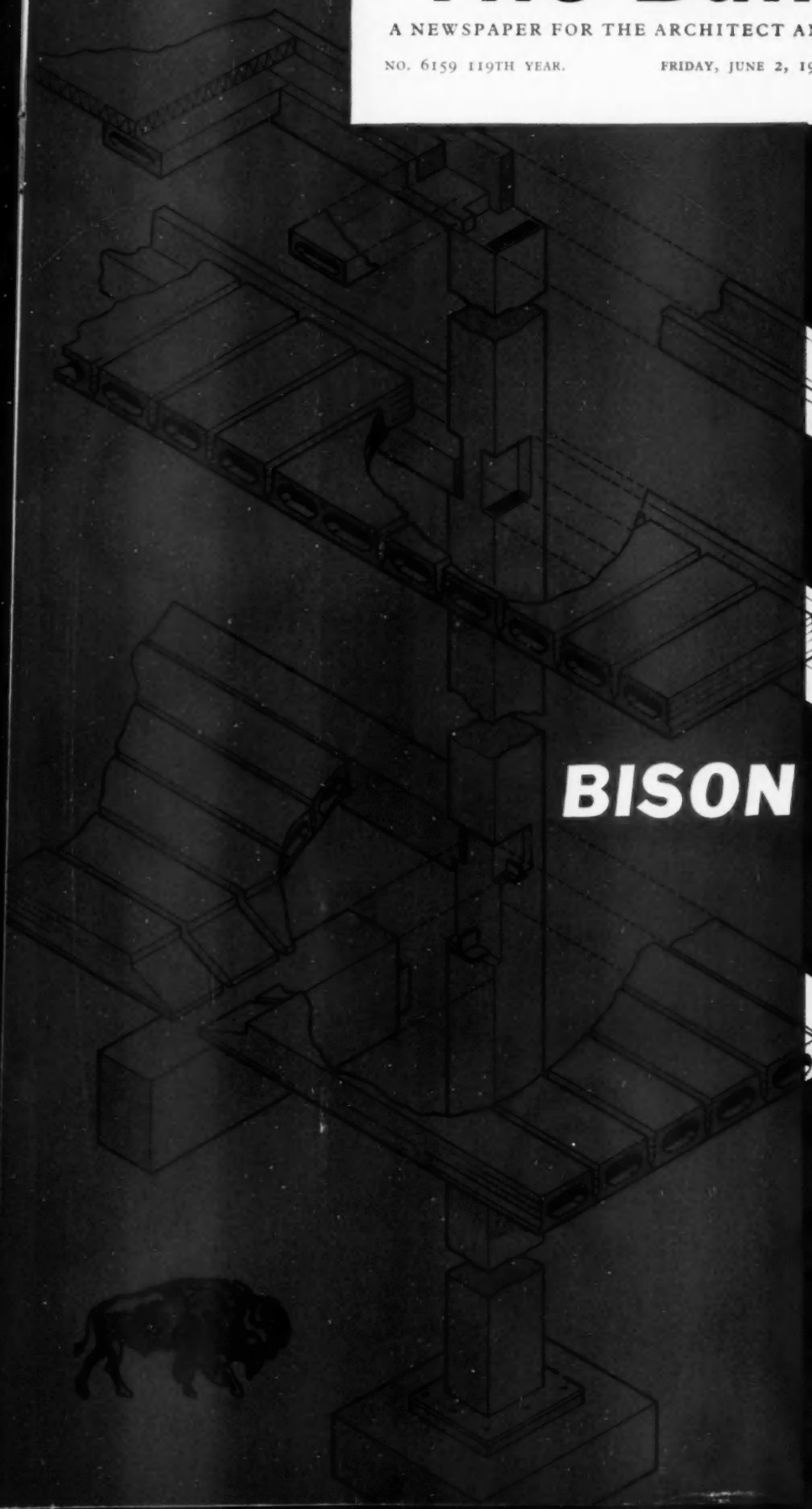

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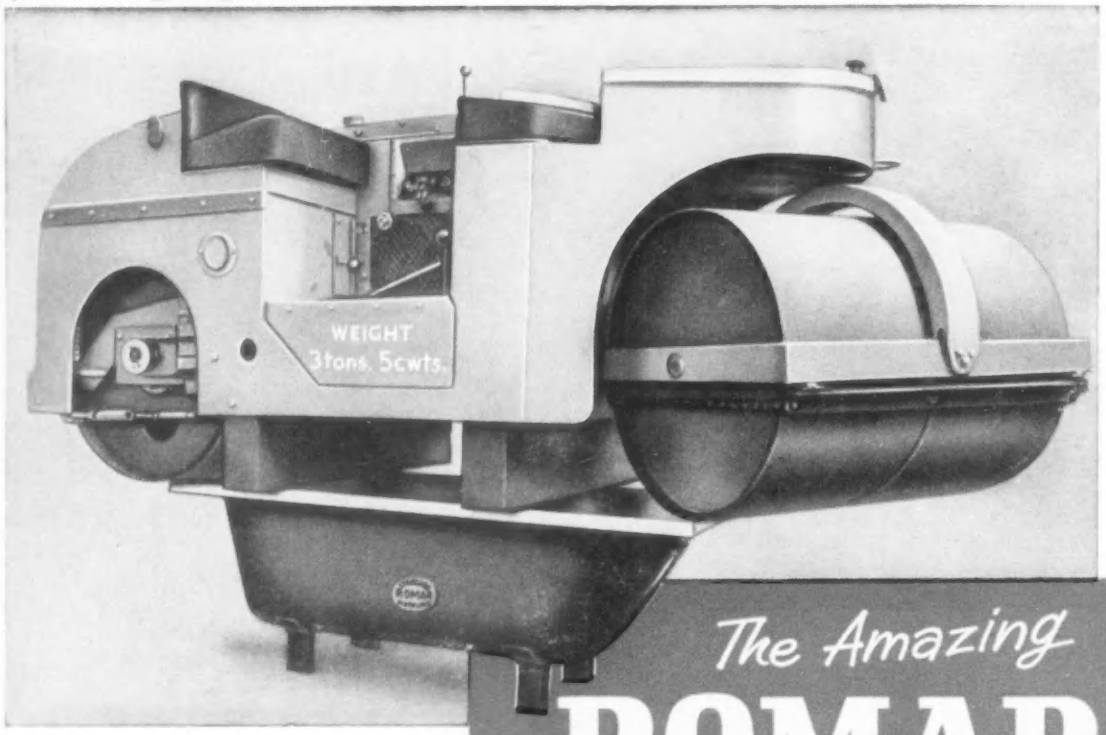

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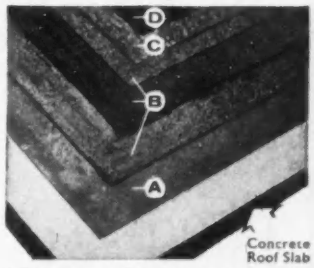

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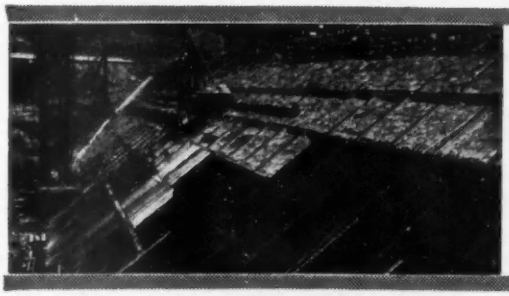

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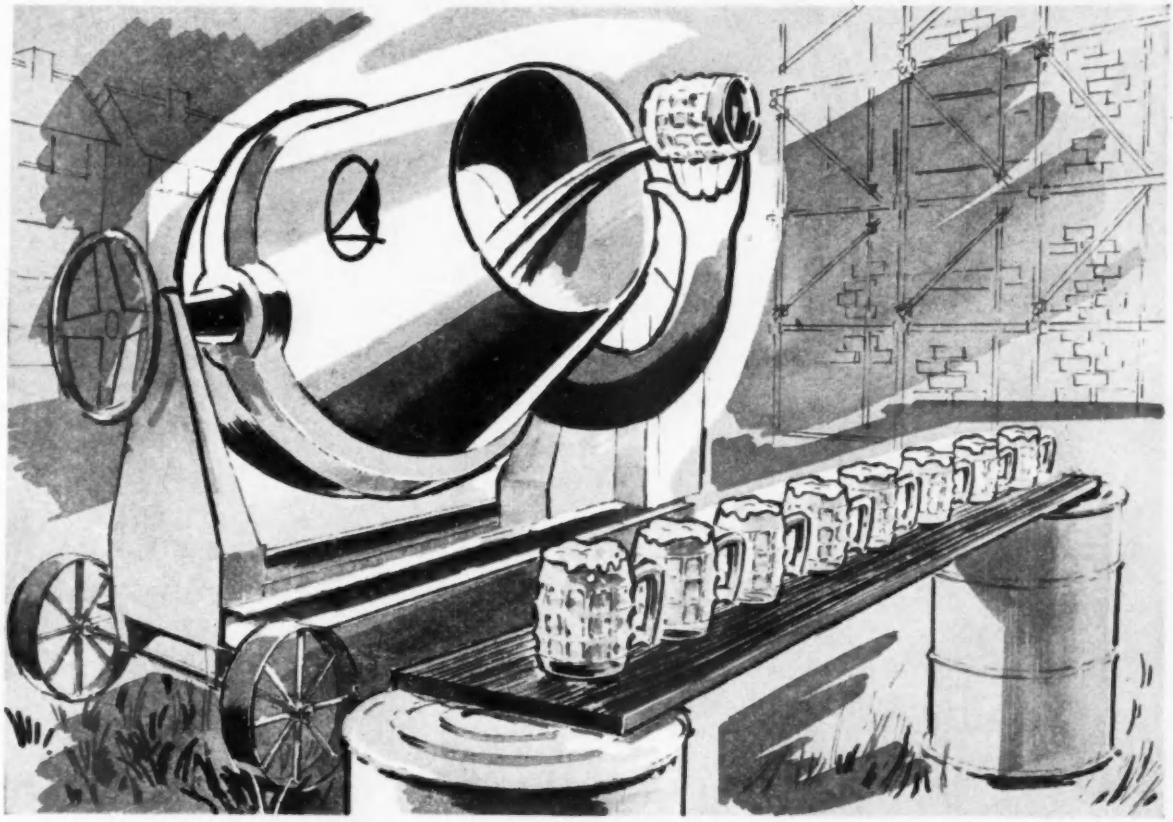

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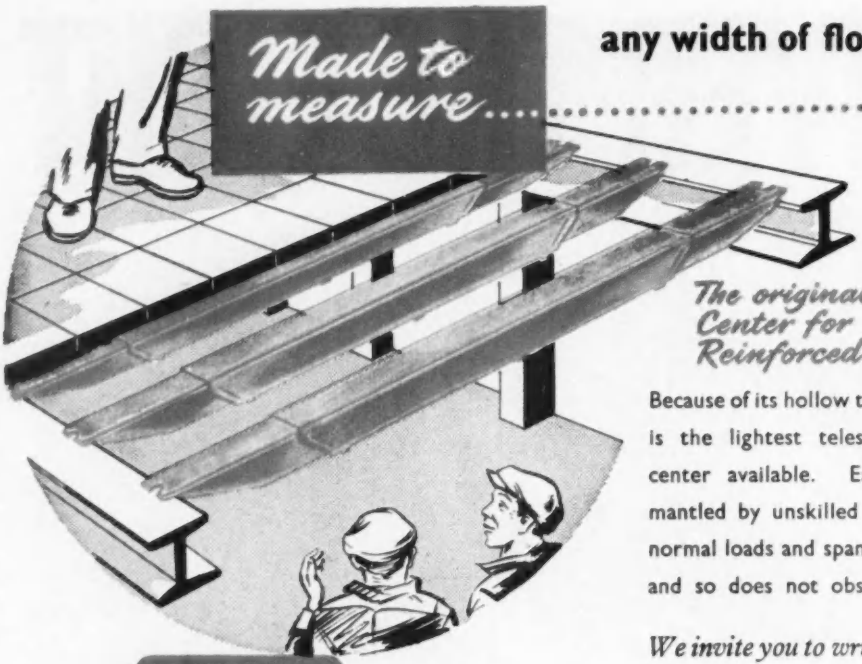

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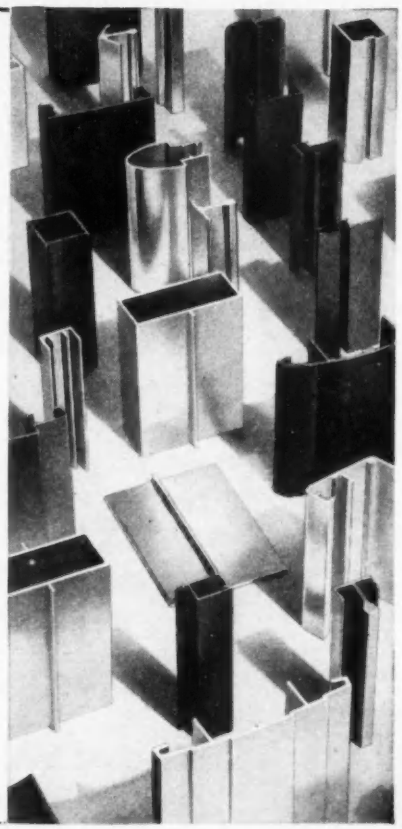

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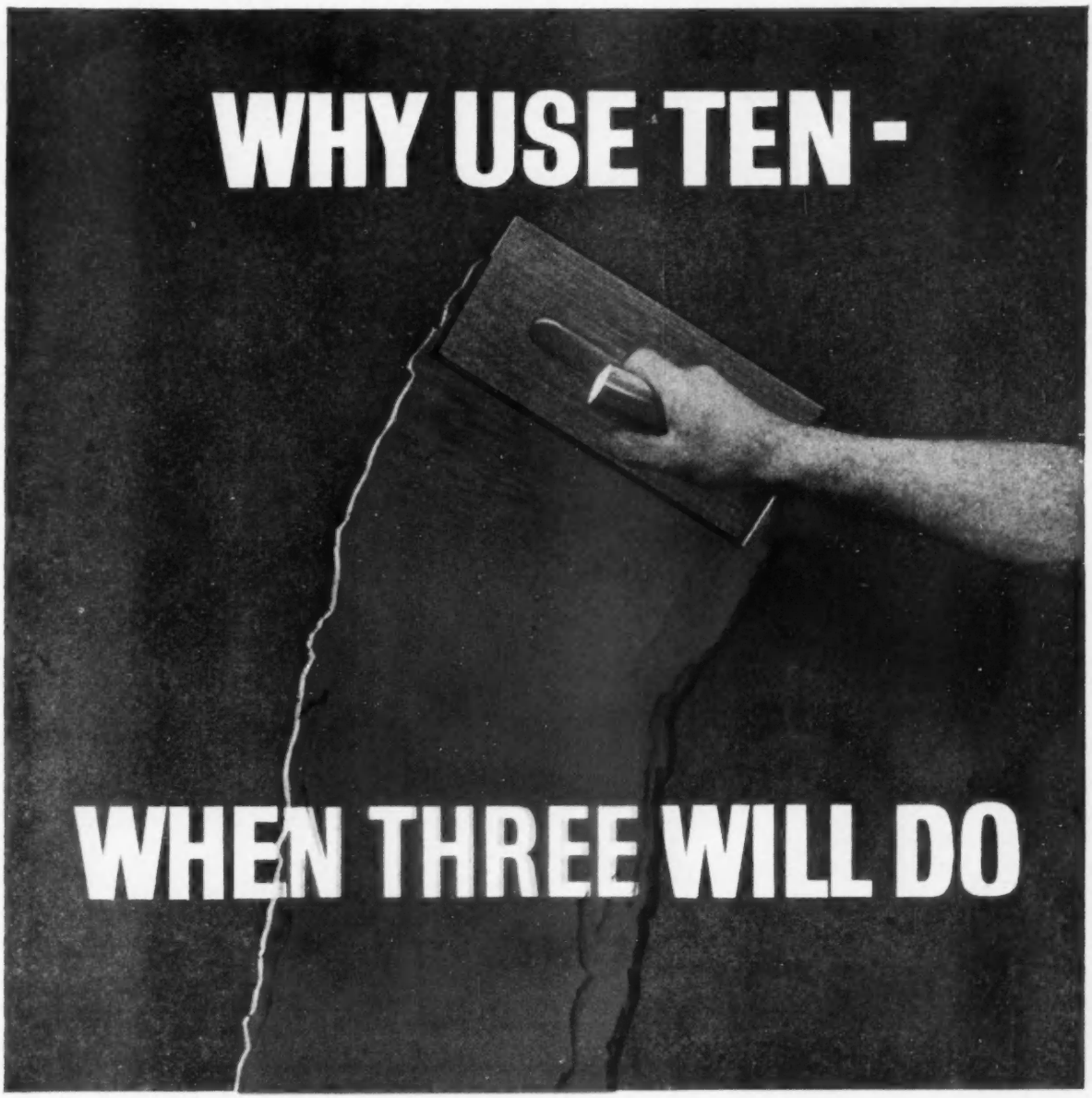

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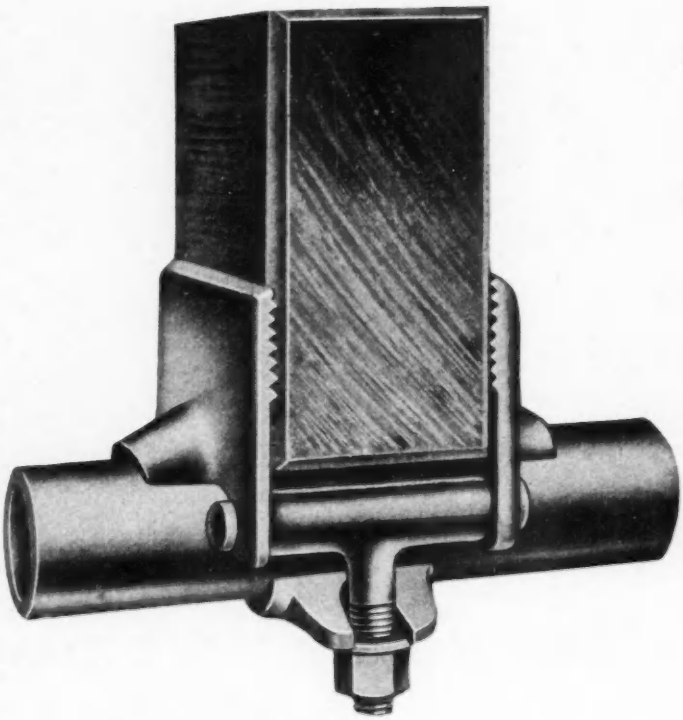

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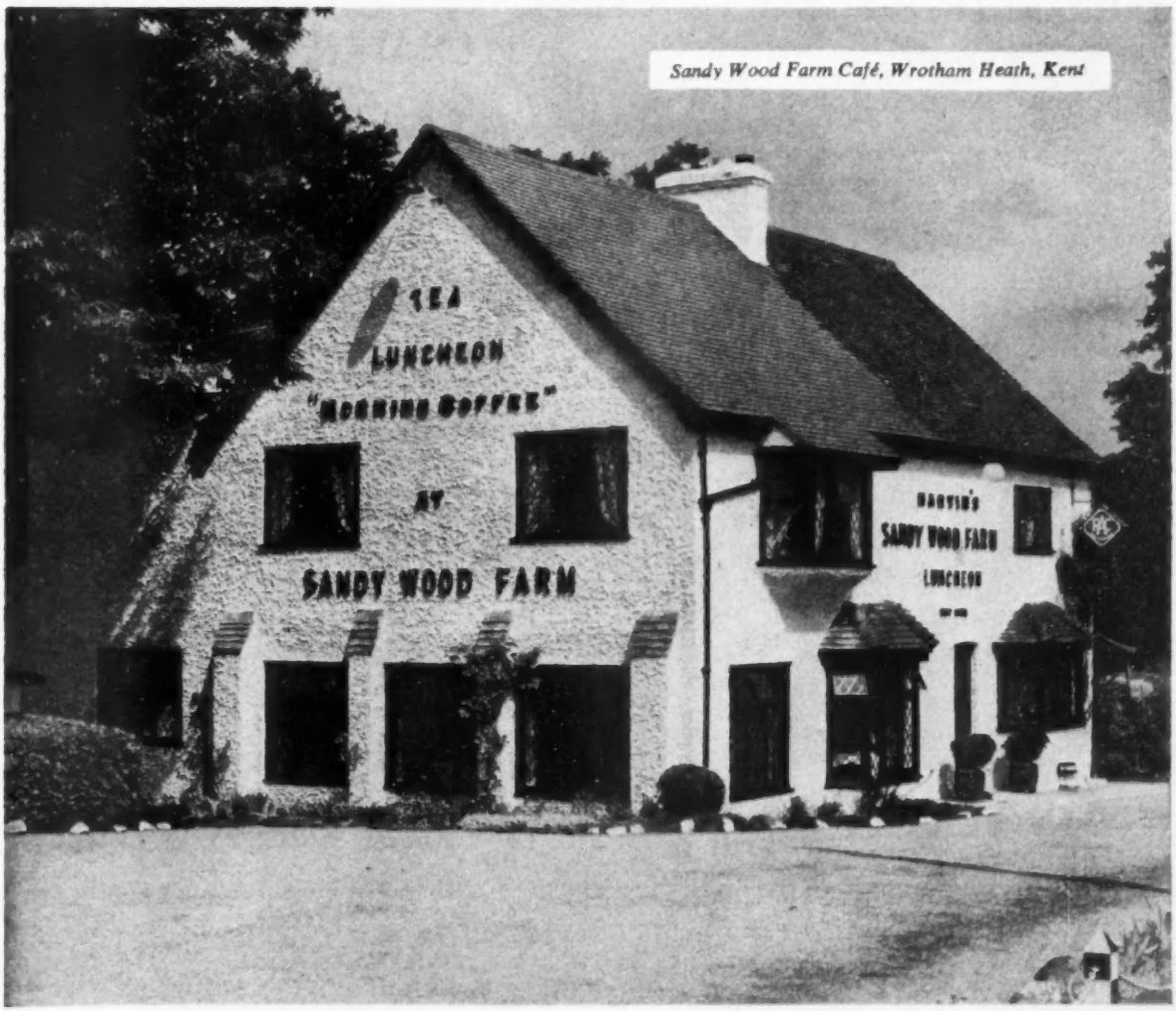

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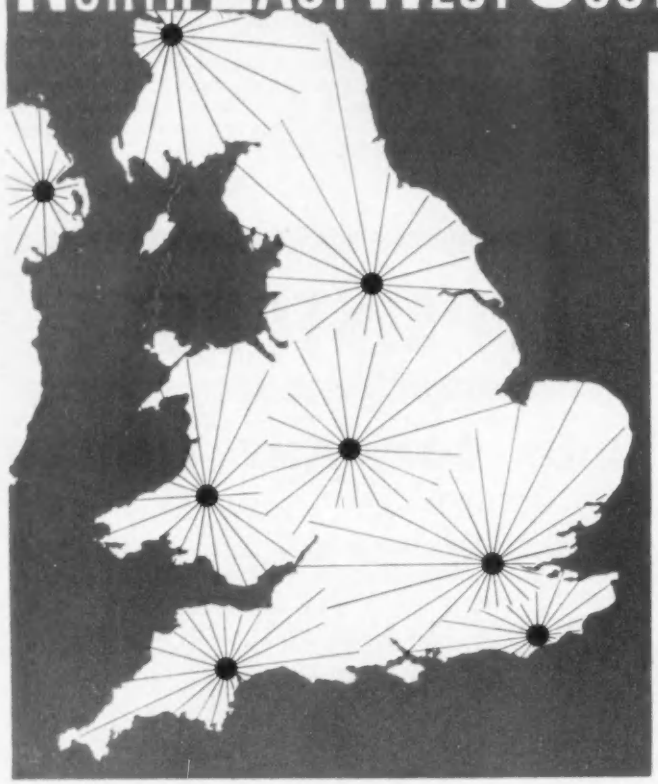

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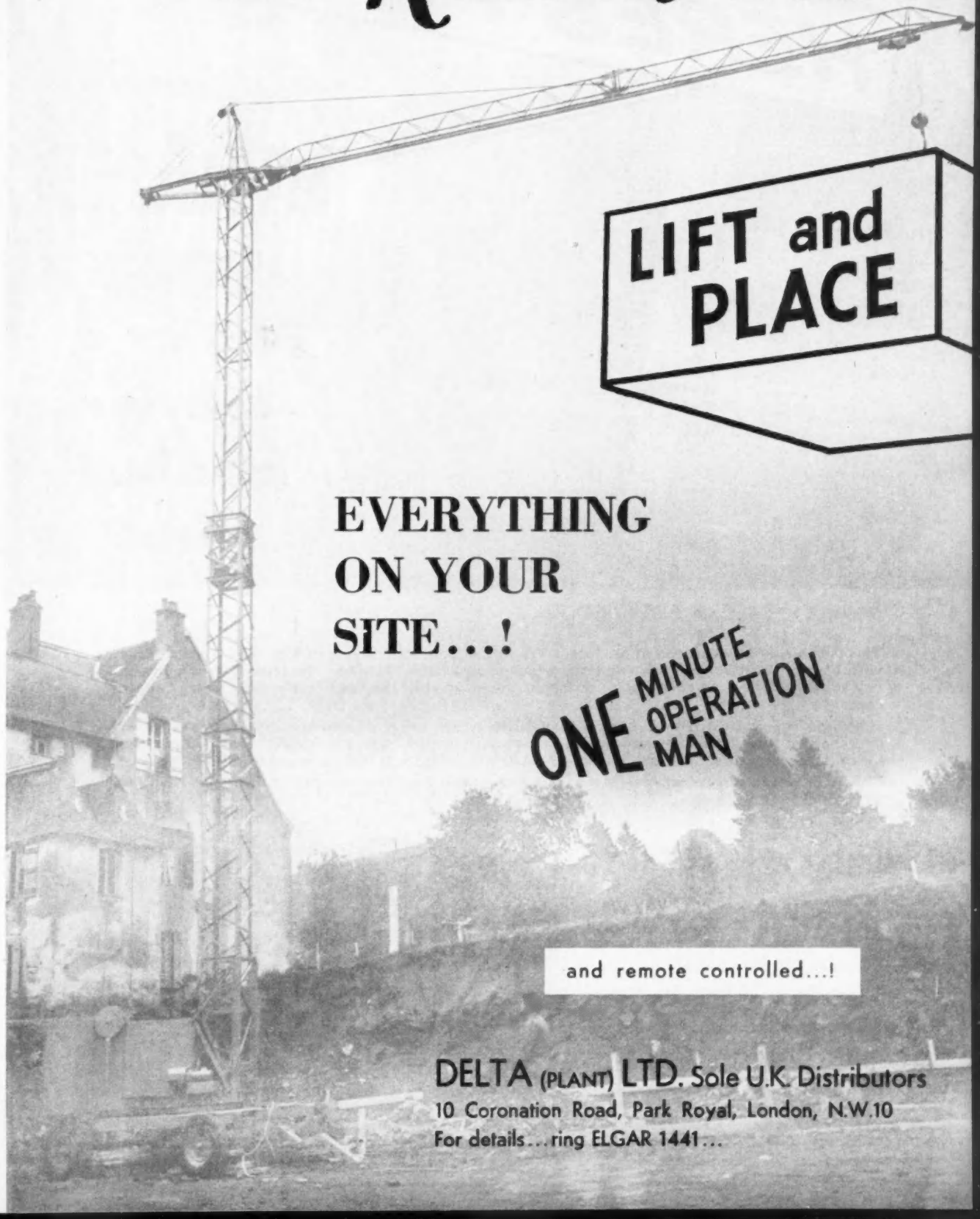

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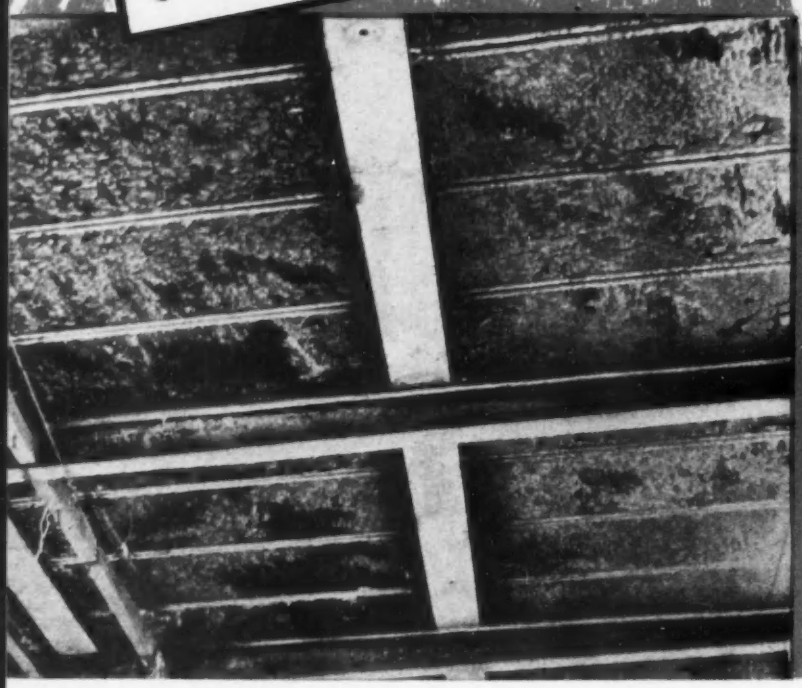

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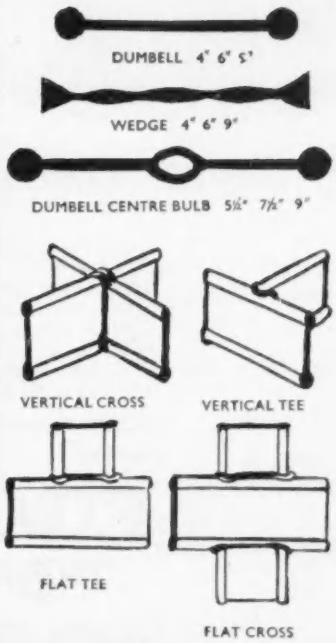
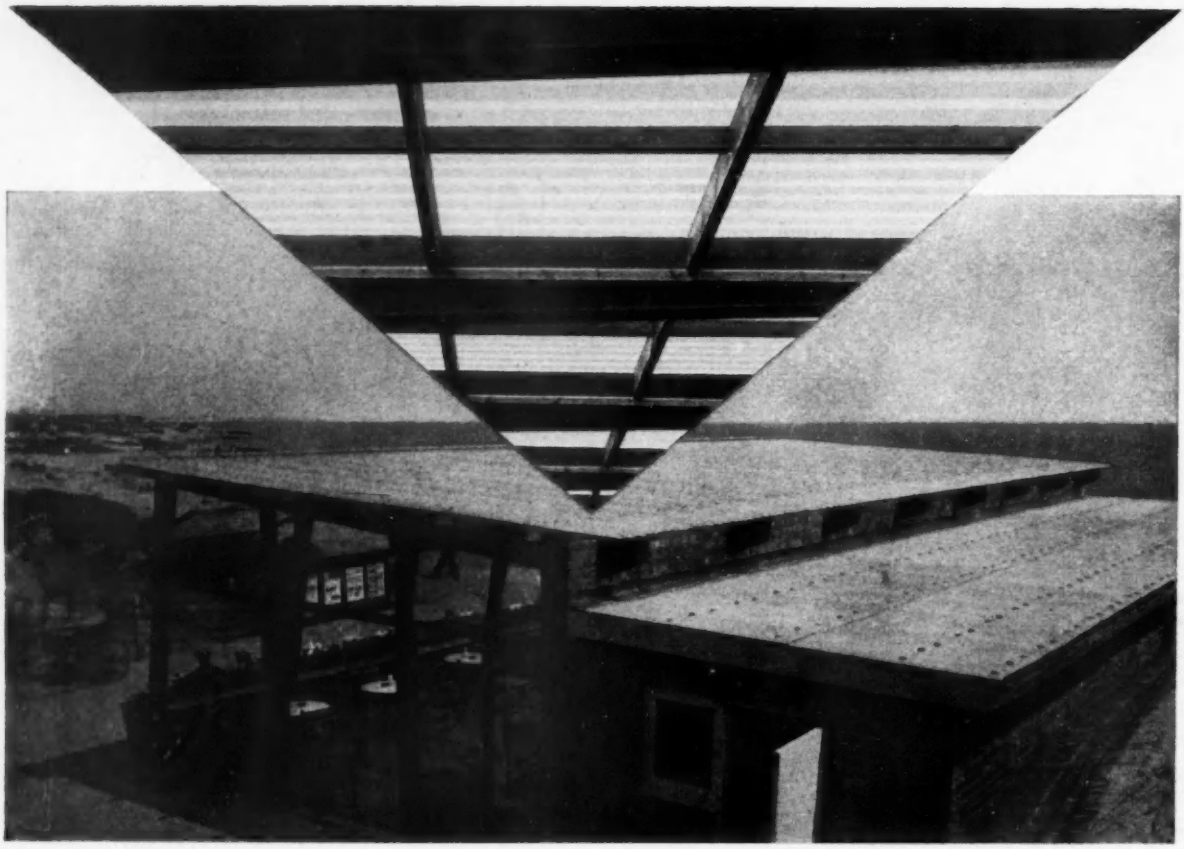


everything points to FILON



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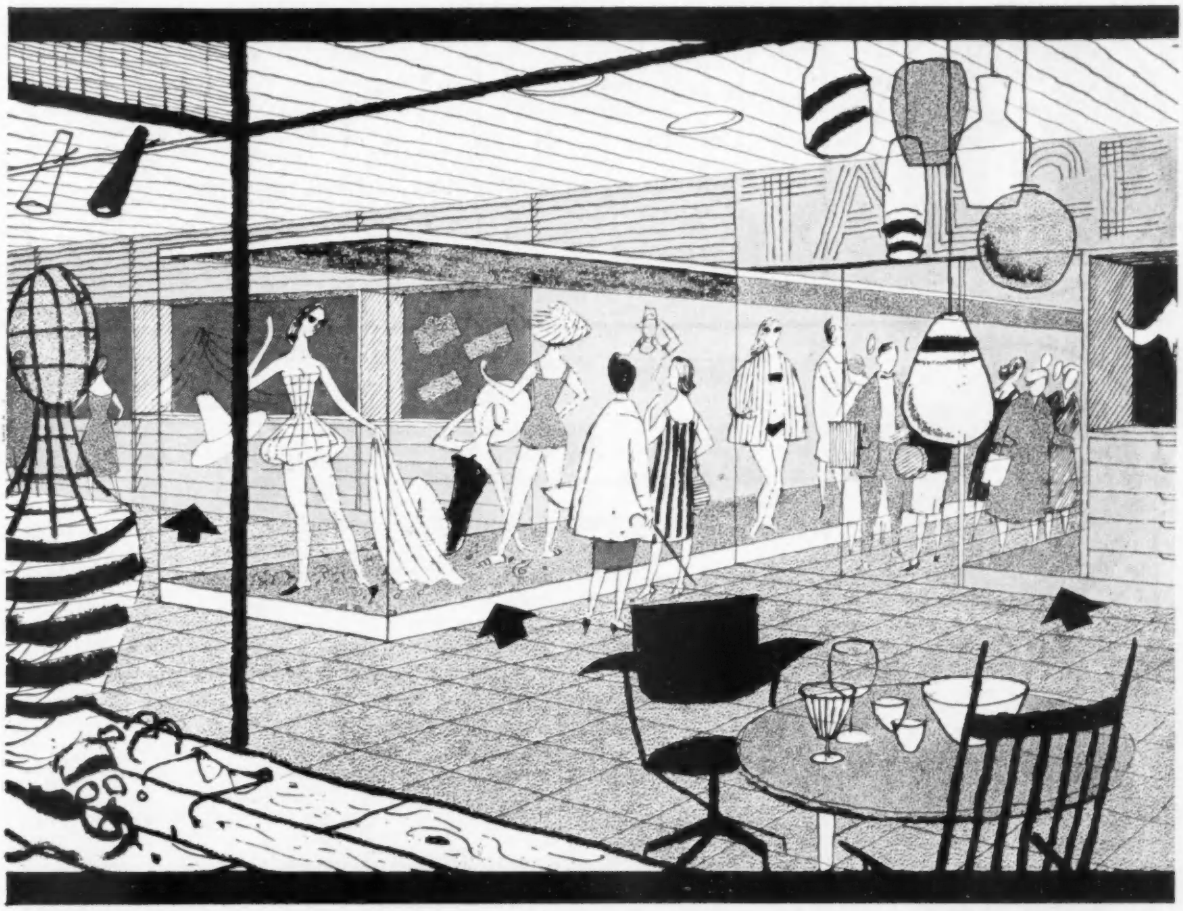
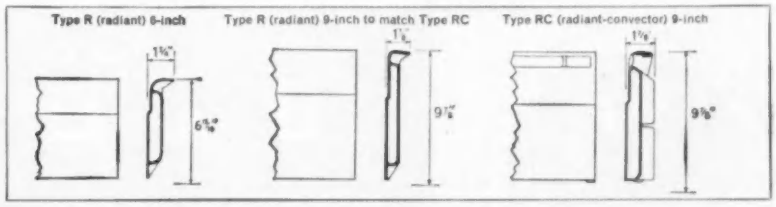


When every inch of wall is wanted

Wherever maximum space is a functional necessity—and there are many instances, such as shops, libraries and exhibition rooms—the problem arises of how to make provision for a heating system that gives the proper requirements of evenly distributed warmth, functions economically, and neither takes up useful wall space nor offends aesthetically by spoiling a clean-looking line.

This, of course, is one of the situations for which Crane Skirting Heating was specifically designed. This system, which employs heating panels in place of the usual skirting boards, is rapidly gaining favour. It is clear that this system gives the designers considerable flexibility of arrangement. The heating panels are quite unobtrusive and may be used round the entire room if necessary, eliminating 'hot spots' and distributing the warmth evenly. In the illustration the position of the Skirting Heating panels is indicated by arrows. They are Type R 6-inch (see diagram). It will be readily appreciated how well this system disposes of the window condensation problem.

3 types of Crane Skirting Heating
Type RC 9-inch is particularly suitable for installing beneath picture-windows and similar features, using elsewhere Type R 9-inch to match. Type R 6-inch meets smaller heat requirements. Panels are in 2-ft and 1-ft lengths and are made in cast iron for resistance to damage and corrosion. ***Decoration;*** *this can be done after installation to suit any colour scheme*



27.8

everything points to **CRANE** skirting heating

Crane Ltd., 15-16 Red Lion Court, Fleet Street, London, E.C.4. *London Showrooms:* 118 Wigmore St., London, W.1 and Great West Road, Brentford, Middlesex. *Branches:* Birmingham, Brentford, Bristol, Glasgow, Leeds, London, Manchester. *Works :* Halifax and Ipswich.

3

Third floor
"Soft furnishings, upholstery, carpets, restaurant"

2

Second floor
"Ladies' coats, children's wear, perfumery"

1

First floor
"Electrical, men's wear, footwear, radios"

G

Ground floor
"Stationery, sports wear, ironmongery, street level"

LIFTS BY
J & E Hall
LIMITED
DARTFORD · KENT Tel: Dartford 23456
London Office: 60 Rochester Row, S.W.1. VICtoria 0354
Offices and Works throughout Great Britain and Overseas
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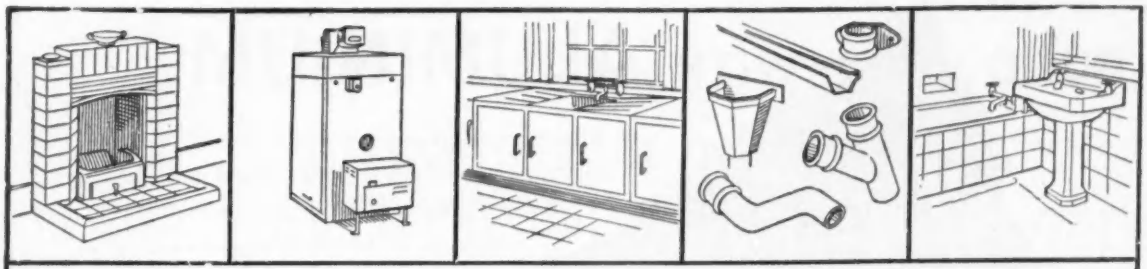
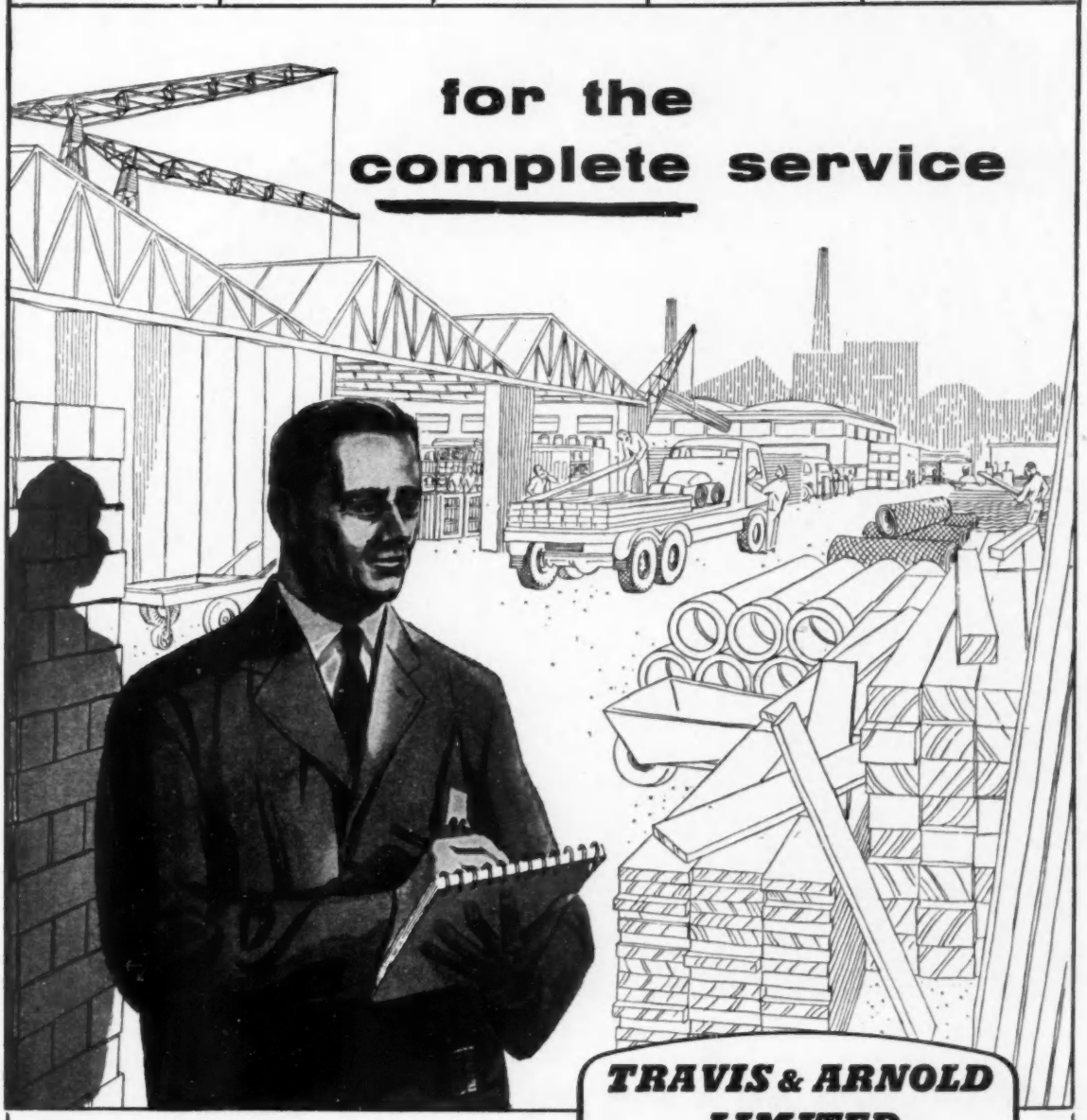
AP 320





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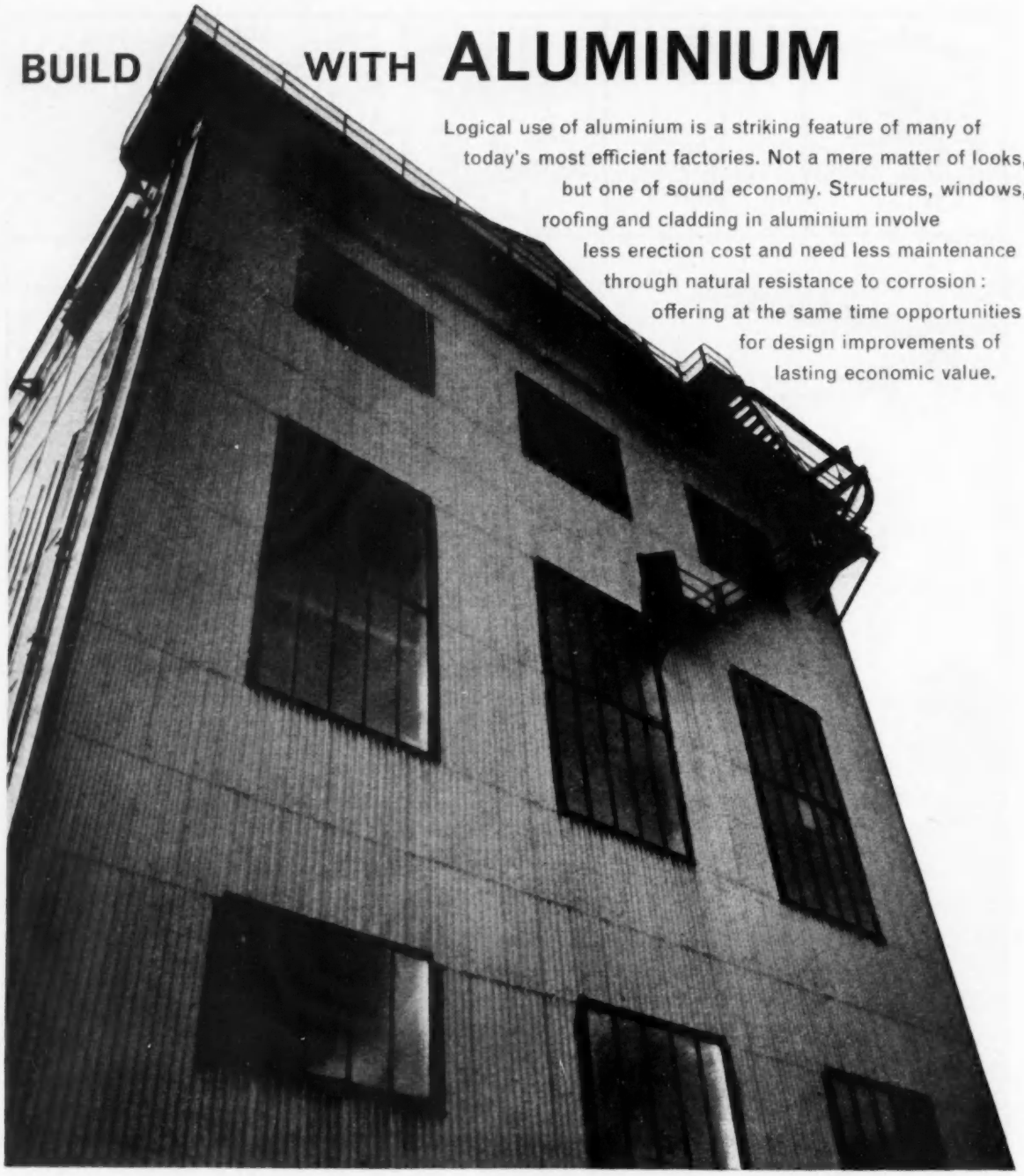
Logical use of aluminium is a striking feature of many of today's most efficient factories. Not a mere matter of looks, but one of sound economy. Structures, windows, roofing and cladding in aluminium involve less erection cost and need less maintenance through natural resistance to corrosion: offering at the same time opportunities for design improvements of lasting economic value.



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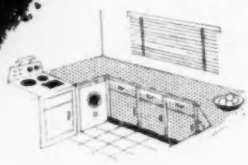
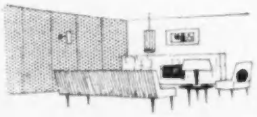
—it comes in 24 different finishes!





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the strongest, smoothest 3-layer board

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FOR BUILT-IN FURNITURE, COUNTER TOPS, WORKING SURFACES

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in a choice of 3 fully protected natural wood veneers

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MELAMINE FACED (AVTREV)

FOR FLOORS, SHELVES, TABLE, DESK, AND BENCH TOPS

BARTREV
Red Edge Clear Plastic Coated Finished Flooring Grade

BARTREV products come complete and ready to use. They are structurally rigid and very easy to work. No adhesive, sanding, waxing or polishing are needed. BARTREV is the only structural board which can be supplied in almost ANY length.

FAST COUNTRYWIDE DELIVERY SERVICE

For further information and samples, please write to the
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BARTREV BOARD COMPANY LTD.
London Sales Office
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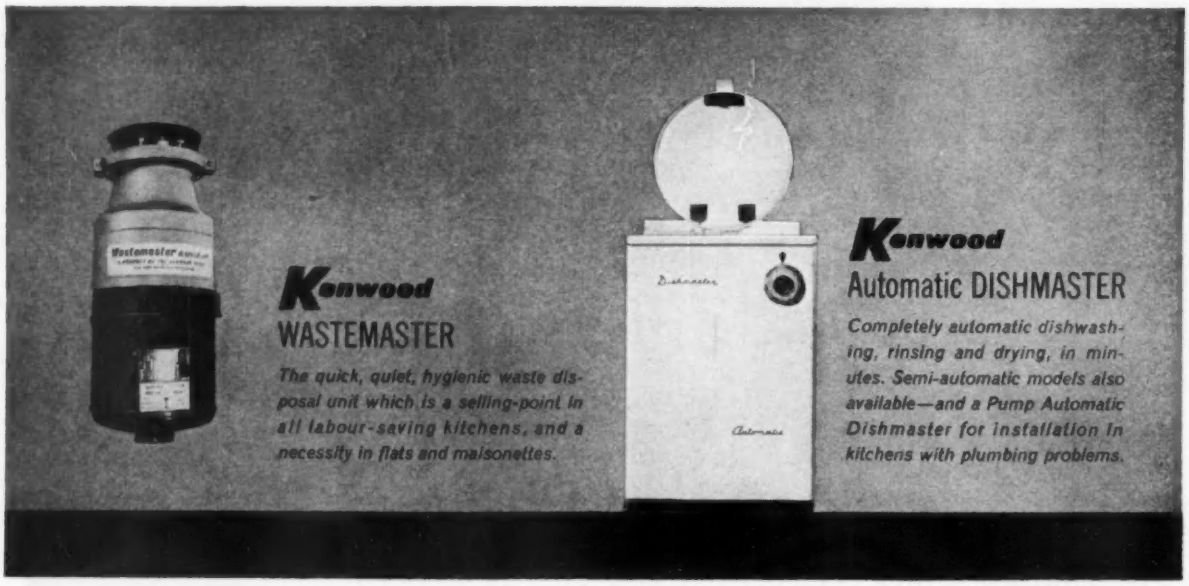
GROsvenor 2415 6

A Kenwood Kitchen sells the

Make Kenwood appliances part of your kitchen plans —and every woman will persuade her husband to buy! For Kenwood gives you the most advanced labour-saving function and design.

A Kenwood Wastemaster is the quickest, most efficient and hygienic way to dispose of kitchen garbage. Fitting under the sink, in place of the normal U-pipe, it grinds up and flushes away all refuse, from tea-leaves to chop bones.

Install a Kenwood Automatic Dishmaster to do all the washing-up—from finest glass and china to greasy pots and pans. The Dishmaster plumbs into the domestic hot water supply . . . and does away with the need for double sinks and draining boards.

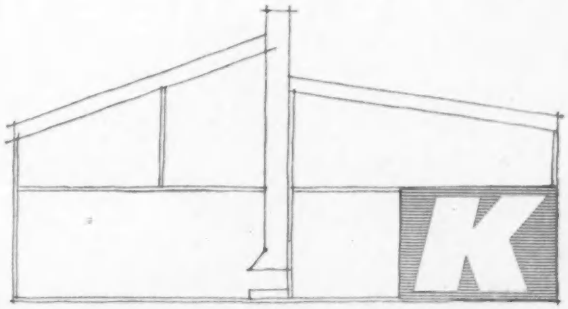


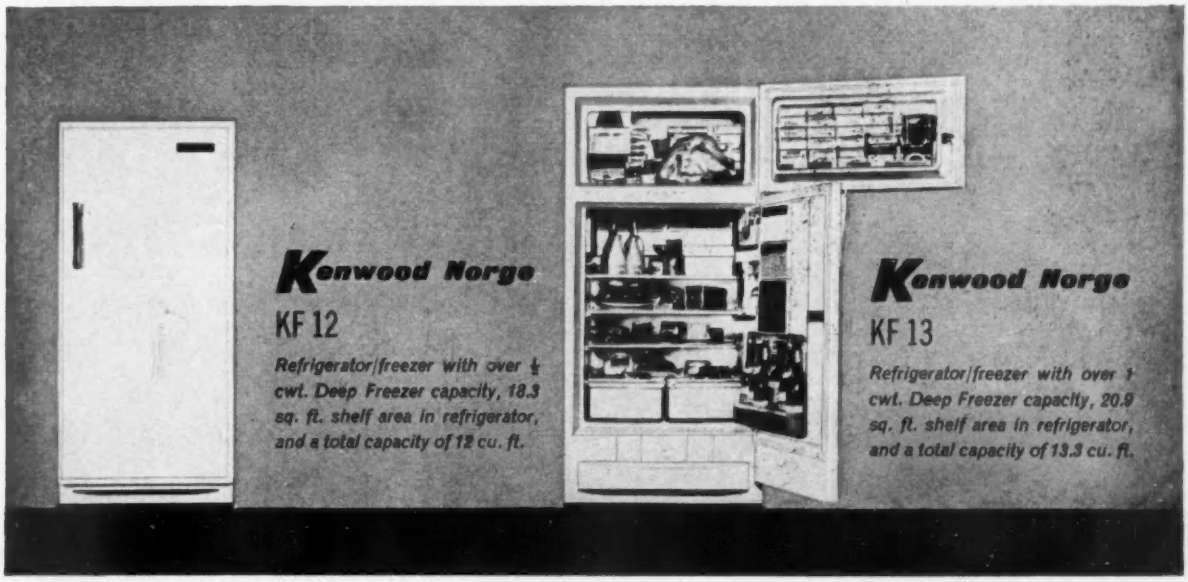
They want the home with

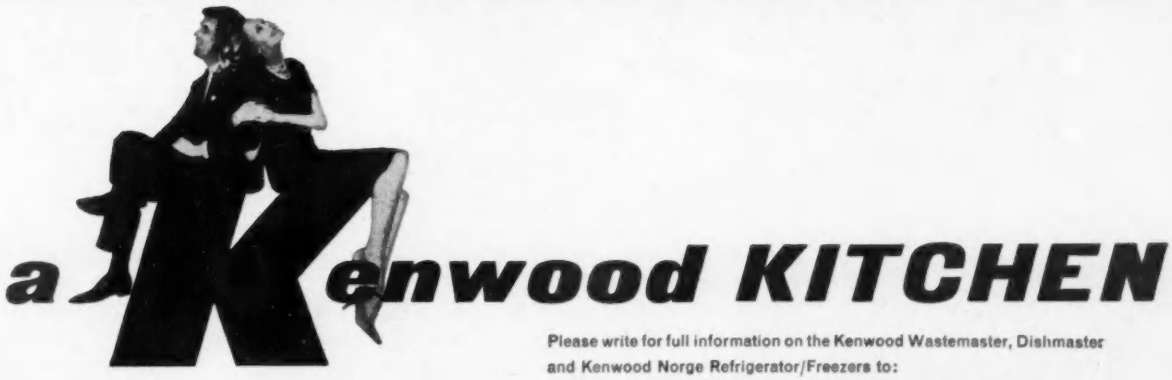
WPS—102

house!

The magnificent Kenwood Norge Refrigerator/Freezers almost make kitchen larders obsolete! Each is a complete food storage unit...with separate deep-freezer cabinet as big as many ordinary refrigerators, and a larder-sized main refrigerator compartment, which is entirely self-defrosting. These handsome two-in-one models meet the growing demand for real home deep-freezing and larger capacity refrigerators in a single, compact unit.







Please write for full information on the Kenwood Wastemaster, Dishmaster and Kenwood Norge Refrigerator/Freezers to:

DEPT. TB.30. KENWOOD MANUFACTURING (WOKING) LTD., OLD WOKING, SURREY

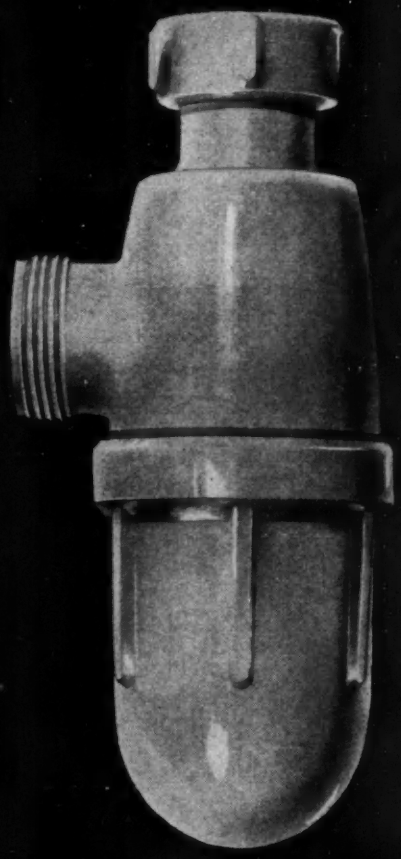
now!

a plastic trap joins the range of well-known

GREVAK

ANTI-SIPHON TRAPS

"GREVAK MONITOR"
(Patent)
anti-SIPHON TRAP IN 'HOSTALEN'



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- COMPLETELY UNSIPHONABLE.
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- RESISTANT TO ACIDS.
- RESISTANT TO DETERGENTS.
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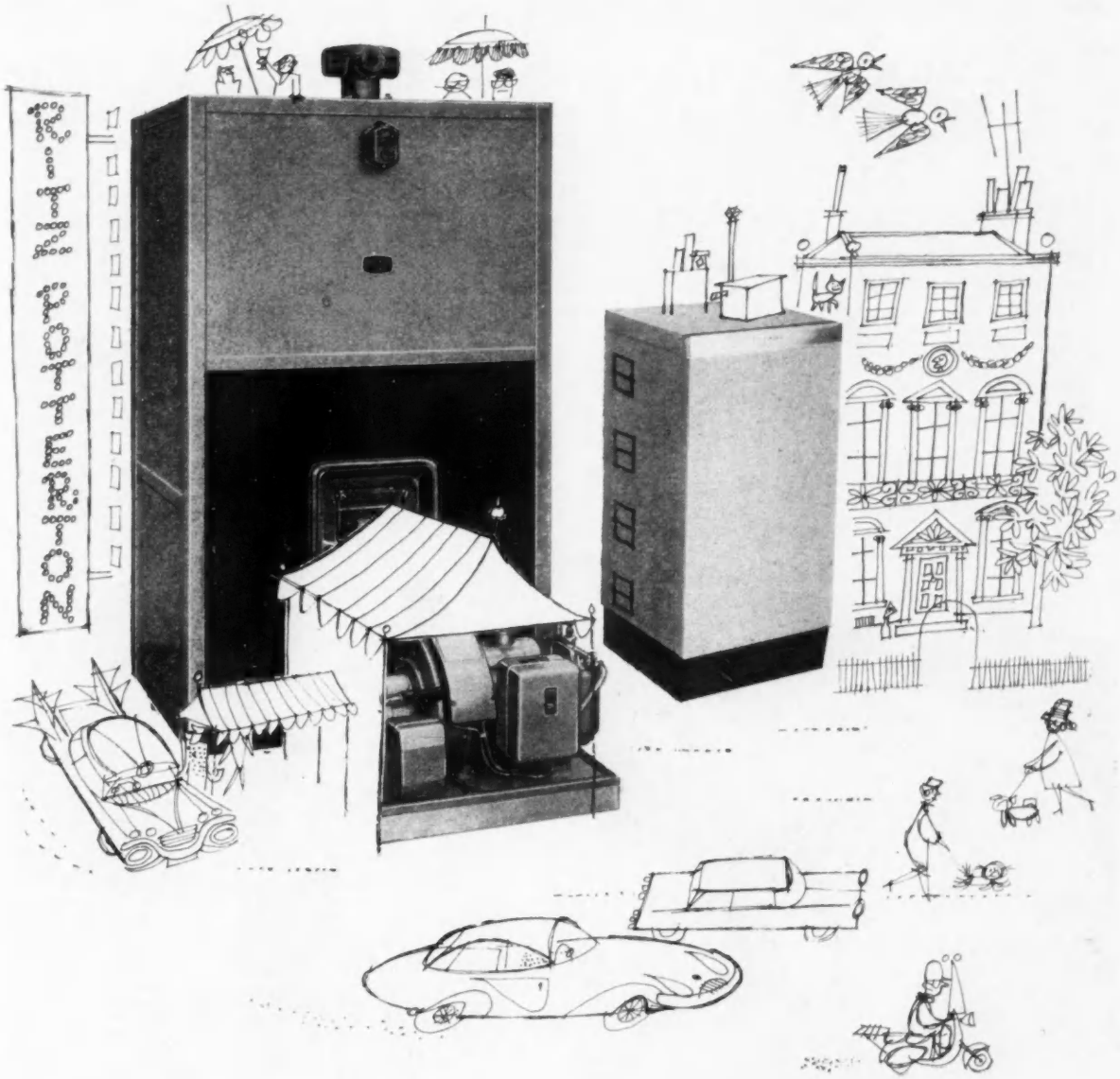
Telegrams: Antivacu, Westcent, London



Potterton heats hotel or home handsomely

Potterton make boilers — oil-fired or gas-fired — rated from 31,000 to 2,000,000 B.th.u./hr. They are automatic, efficient, economical and purpose designed.

Potterton have been making boilers since the year dot. Very experienced people. Very reliable boilers. Pick Potterton. It pays.

Is your Potterton file up to date? For all the latest information by return post, just jot "boiler information, please" on your letterhead and send it to us.

Two Potterton FOA oil-fired boilers (outputs: 1,000,000 and 625,000 B.th.u./hr.) heat the Griffin Hotel, Leeds.

And domestic Pottertons — gas-fired Diplomat 44, supplied by Hall & Co. — heat forty-two new homes built by Cook (Brighton) Limited, just outside Hove.

Potterton Boilers at the heart of efficient central heating — oil or gas

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Potterton is a registered trade mark.

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Granwood Flooring Co. Ltd. is a member of British Steel Construction Group of Companies

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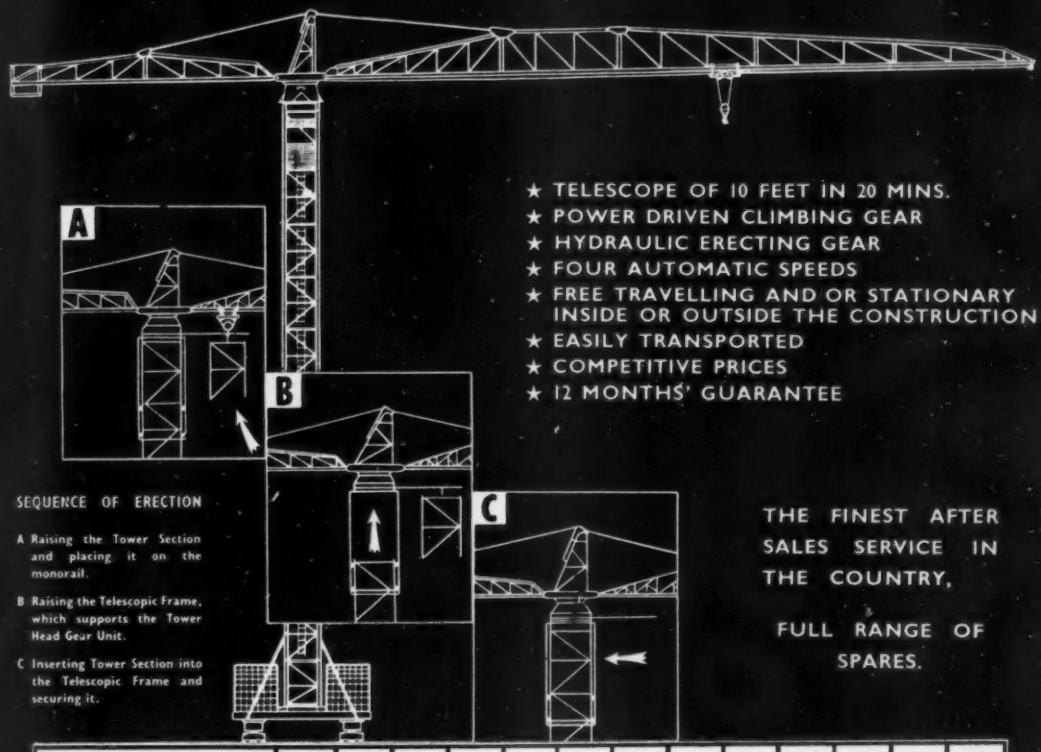

★ TELESCOPE OF 10 FEET IN 20 MINS.
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★ 12 MONTHS' GUARANTEE

SEQUENCE OF ERECTION

A Raising the Tower Section and placing it on the monorail.

B Raising the Telescopic Frame, which supports the Tower Head Gear Unit.

C Inserting Tower Section into the Telescopic Frame and securing it.

THE FINEST AFTER SALES SERVICE IN THE COUNTRY,

FULL RANGE OF SPARES.

TYPES	306	404.E	406	506.A2	506.A4	607.B3	607.B2	707.B2	707.B1	805.A3	805.A2	806	905
Capacity in metre/tons	9 m/t	11 m/t	15 m/t	20 m/t	20 m/t	28 m/t	32 m/t	36 m/t	40 m/t	45 m/t	50 m/t	60 m/t	120 m/t
Maximum jib radius	50 ft.	60 ft.	66 ft.	82 ft.	82 ft.	92 ft.	82 ft.	99 ft.	82 ft.	99 ft.	82 ft.	99 ft.	134 ft.
S.W.L. at maximum radius	12 cwt.	12 cwt.	15 cwt.	15 cwt.	15 cwt.	20 cwt.	25 cwt.	24 cwt.	30 cwt.	30 cwt.	40 cwt.	40 cwt.	60 cwt.
Maximum S.W.L.	1¼ ton	1¼ ton	1½ ton	2 ton	2 ton	3 ton	3 ton	3 ton	5 ton	6 ton	6 ton	6 ton	10 ton
Maximum S.W.L. radius	26 ft.	33 ft.	36 ft.	36 ft.	36 ft.	36 ft.	36 ft.	44 ft.	44 ft.	29 ft.	31 ft.	37 ft.	47 ft.
Height under hook "free travelling"	70 ft.	70 ft.	98 ft.	98 ft.	98 ft.	135 ft.	135 ft.	135 ft.	135 ft.	127 ft.	127 ft.	127 ft.	183 ft.
Height under hook when "static"	200 ft.	200 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.	350 ft.
Height under hook when "climbing"	N	O	—	L	I	M	I	T	A	T	I	O	N
Maximum hoist speed	105 f/m	105 f/m	140 f/m	125 f/m	160 f/m	200 f/m	200 f/m	200 f/m	200 f/m	200 f/m	200 f/m	200 f/m	200 f/m

Concessionaire in U.K.:

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RECORD TOWER CRANES

THE CRANES 10 YEARS AHEAD . . .

F. POTAIN & CO. (FRANCE)

Look first at NAIRN for

BROADMEAD'S 'OPERATION LIGHTNING SHOPFITTING'

SHOP: Broadmead Ltd, Edgware Road.
PROBLEM: How to install a tough new floor with a 'house-style'—at top speed.
ANSWER: Marbled white linoleum, laced with black feature strips, gives a terazzo 'house-style' effect to the entrance arcade, so that the open shop appears to extend right to the pavement's edge. Even here, completely exposed, Nairn linoleum stands up to the weather very well.
COMMENT: A blend of imagination and common sense typical of Broadmead (and Nairn, too).
FLOORING CONTRACTOR: THE LINO TILE CO

SHOPPING'S A WALKOVER AT INTERNATIONAL STORES

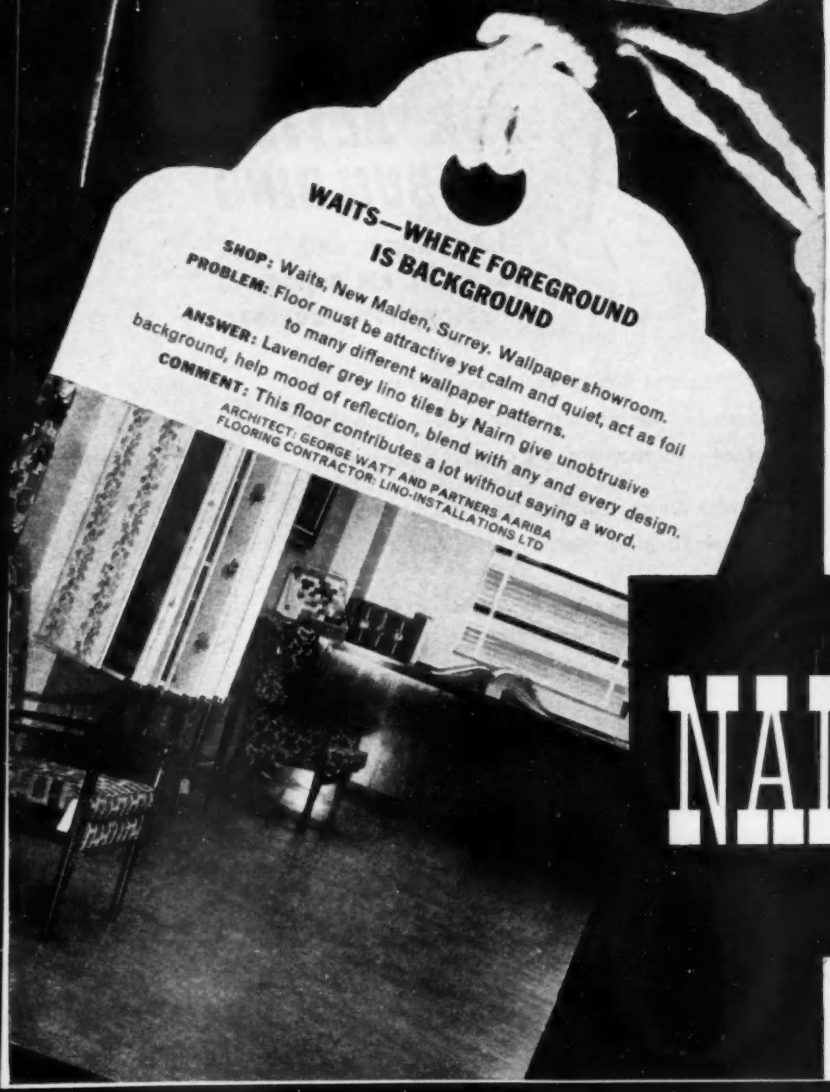
SHOP: International Stores, Croydon.
PROBLEM: Streamlined routes result in concentrated traffic—and concentrated wear.
ANSWER: Nairn linoleum in Royal Red and Blondwood, contractor-cut to make this vivid directional chequerboard. International Stores use 4.5 mm Nairn linoleum in many of their shops, and find it very hardwearing, despite the stab of female footwear.
COMMENT: In value for money, you can't beat Nairn linoleum.
ARCHITECT: W. J. LEE, LRIBA, ARICS
FLOORING CONTRACTOR: LEWIS BROS (KING'S CROSS) LTD

SMITH'S FLOOR SHOWS THE WAY

SHOP: W. H. Smith, Ealing. **PROBLEM:** To give the floor of this large shop a feeling of life and movement
ANSWER: Introduce red and black arrowheads, formed from Nairn lino tiles, to a floor of grey tiles—thus achieving a bold directional effect.
COMMENT: Keeping it simple is half the battle.
ARCHITECT: H. F. BAILEY, RIBA FLOORING CONTRACTOR: THE LINO TILE CO

NOTE: When this advertisement appeared previously, part of the floor of W. H. Smith's shop shown was inadvertently attributed to Nairn; in fact the flooring was by Bulgomme-Silence. We apologise for this error.

shop flooring—



Four shops, four problems, four solutions—with Nairn linoleum

You see here four widely different shops: a fast-moving, hard-selling, electrical goods shop; a quiet and dignified wallpaper showroom; the browse-worthy record bar of a bookstore; and a streamlined supermarket. In each case, the floor poses a different problem—and in each case Nairn linoleum provides the solution.

A LONG LIFE—AND A CLEAN ONE

You'll see the detailed hows and wheres of these solutions beside each picture. The two big reasons why so many architects specify Nairn linoleum for shop floors are its long life and its ease of maintenance. Nairn linoleum is extraordinarily hardwearing: one store laid Nairn lino tiles at the head and foot of its escalators four years ago, and today—forty million hard-walking customers later—the floor is still in good condition. When it comes to maintenance costs, Nairn linoleum can save you up to one third as against thermoplastic floors.

WHAT YOU GET

You get a lot for your money when you specify Nairn linoleum. You get good looks with long life; you get economy with versatility; you get colour with strength. That's why it pays to look first at Nairn linoleum for shop flooring . . . or, indeed, any other.

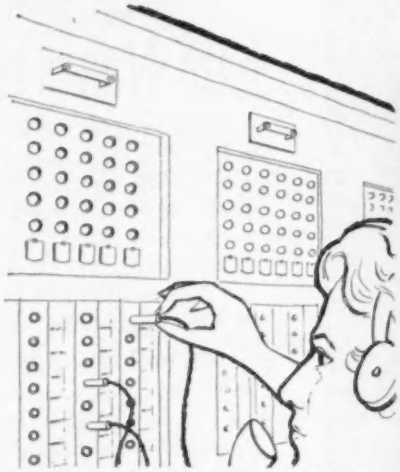
NOW NAIRN HELPS THE ARCHITECT

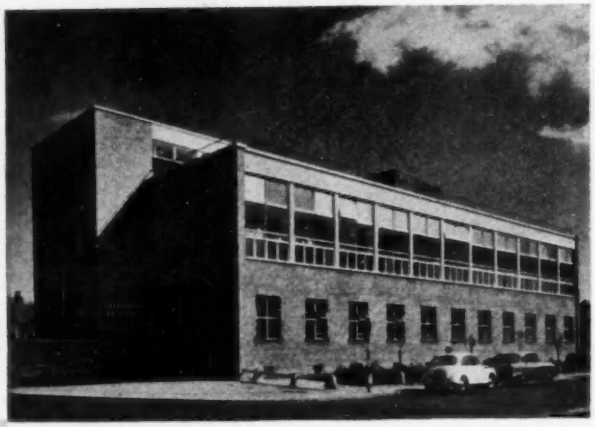
You can quickly get skilled advice and information on any floorcovering—not only linoleum—from your nearest Nairn technical representative. Phone, call or write.

NAIRN *linoleum*

LONDON · BIRMINGHAM · MANCHESTER
GLASGOW · KIRKCALDY

Dial Alotan!





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Alotan Admix and Pallas S2 aid builder to beat icy winter weather.

During the construction of two telephone exchanges at Lowestoft and Felixstowe in severe winter conditions, Pallas S2—incorporated in the concrete formwork—accelerated setting and acted as an antifreeze agent, making construction work quicker and easier.

All the bricks used in construction were laid with cement mortar containing Alotan Liquid Cement Mortar Admix to give extra strength and protection.

ALOTAN

EASES MIXING, giving a better, smoother, more silky mix.

SPEEDS WORK. Alotan mortar spreads more readily and the trowel stays clean.

SAVES MONEY. Alotan saves up to 50% of the cement content in a mix of 8 : 1. THE USE OF LIME IS CUT OUT COMPLETELY.

GIVES PROTECTION. Mortar sets more securely and is protected against rain and frost.

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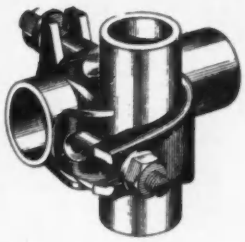
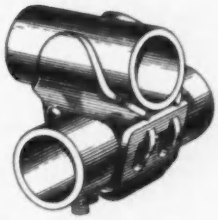


DOUBLE COUPLER 5/9



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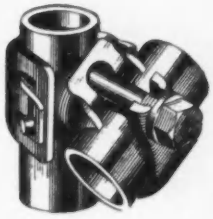

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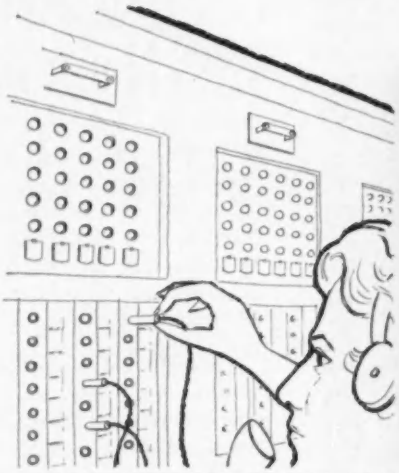

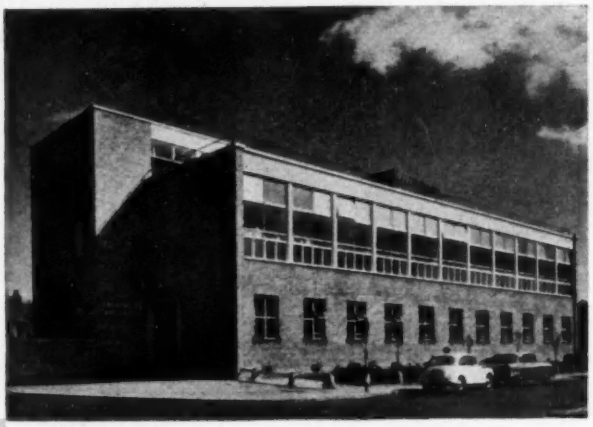

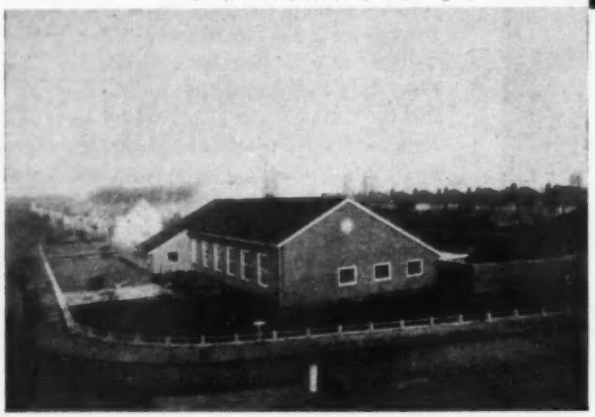

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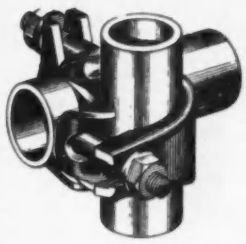

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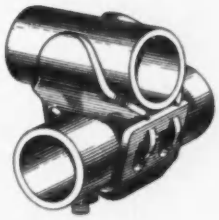

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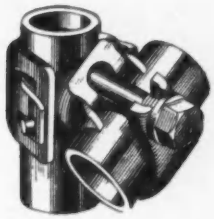

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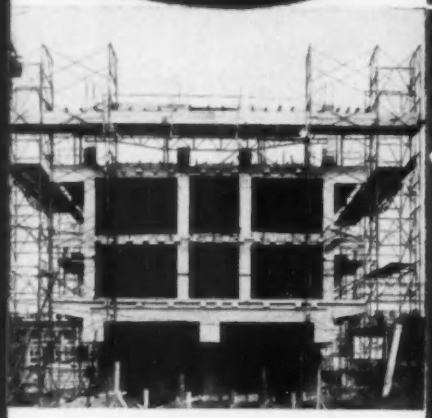

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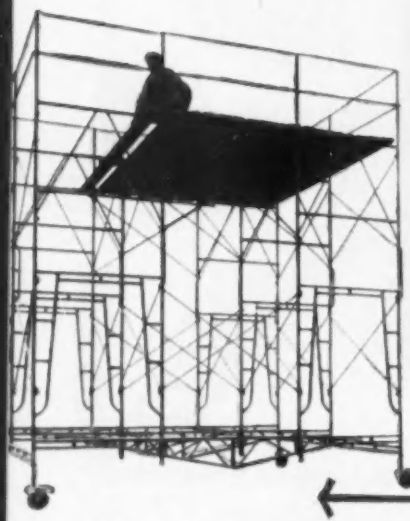

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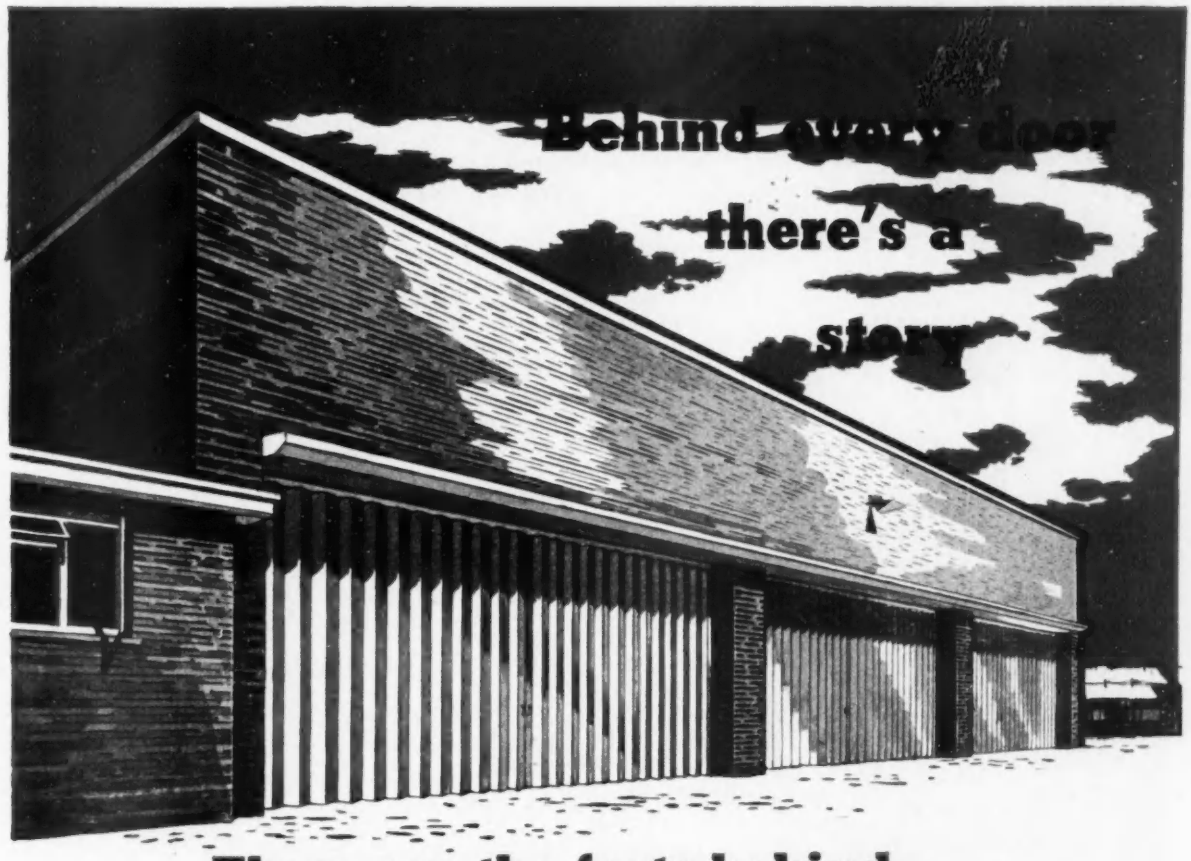

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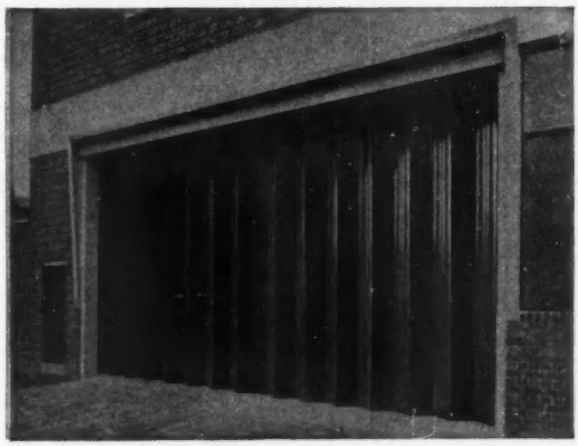

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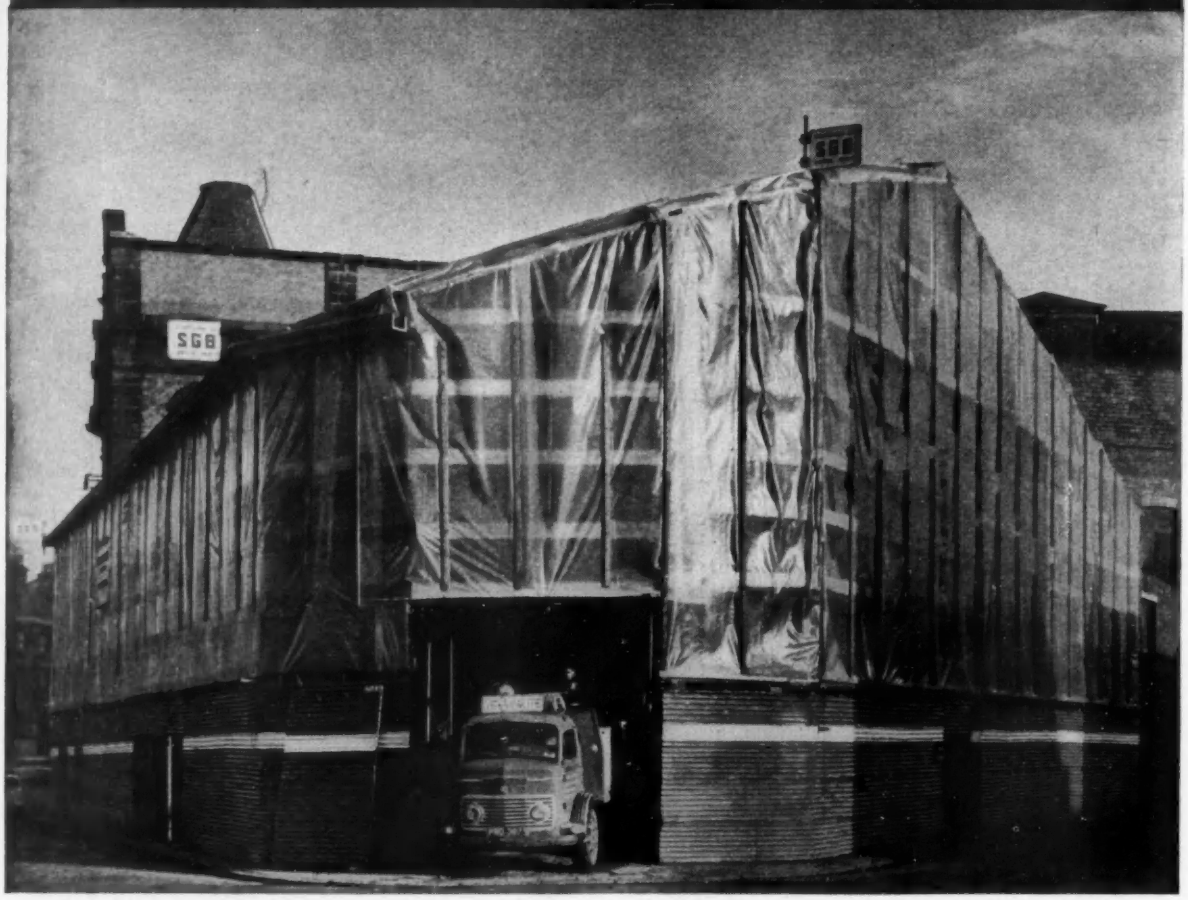
'Visqueen' (REGD.) quickens tempo on Mecca Ballroom extension



A temporary weatherproof structure clad with 'Visqueen' polythene building sheet over extensions to the Locarno Ballroom, Liverpool, for Mecca Ltd.
Contractors: James Crosby & Sons Ltd.
Tubular Framework: Scaffolding (Gt. Britain) Ltd.

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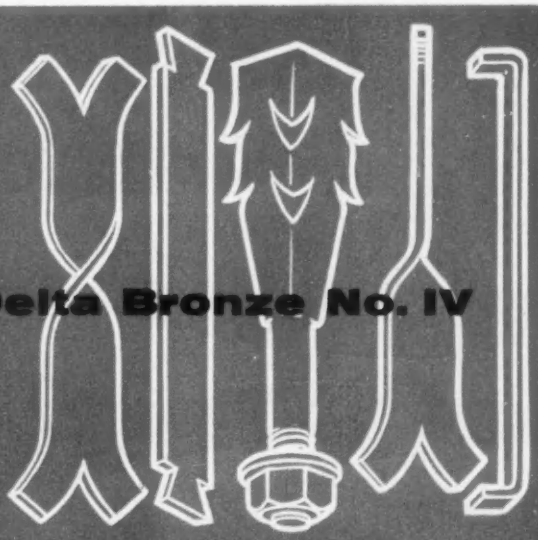

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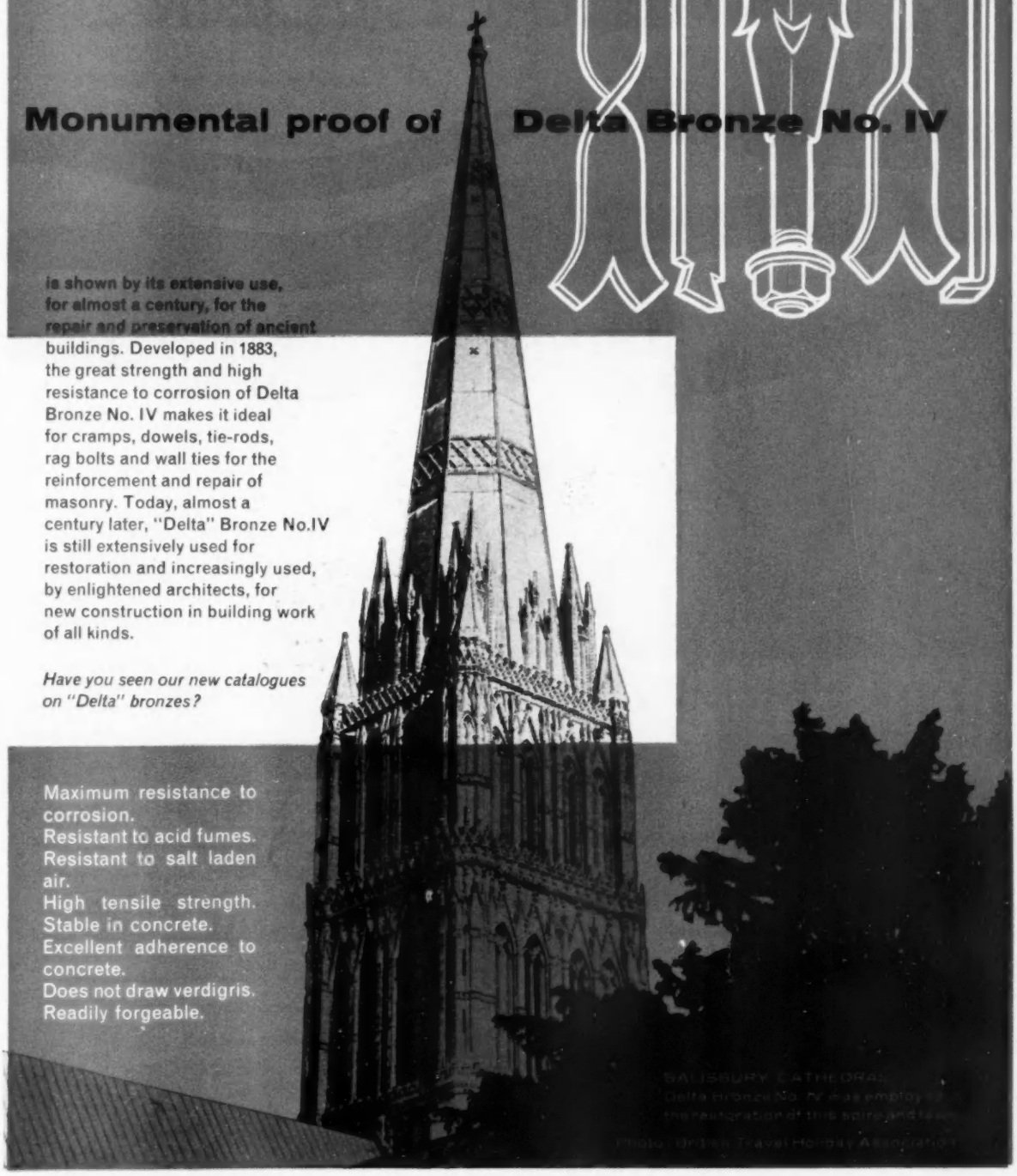

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Readily forgeable.

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Delta Bronze No. IV was employed in the restoration of this spire and tower.
Photo: Dorset County Council Holiday Association

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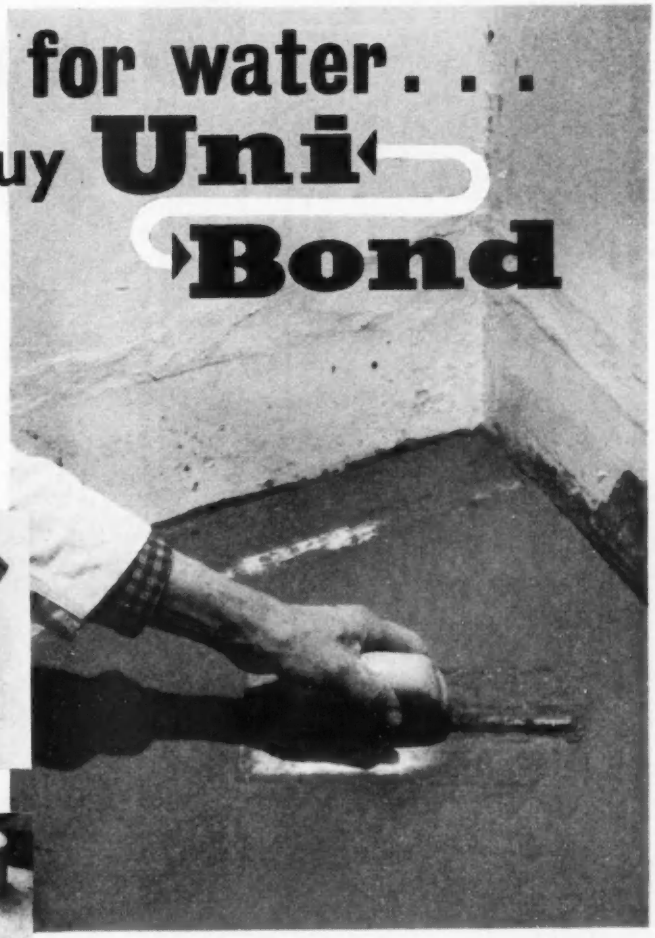

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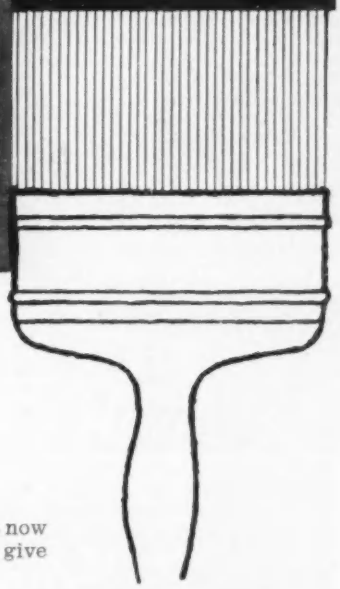

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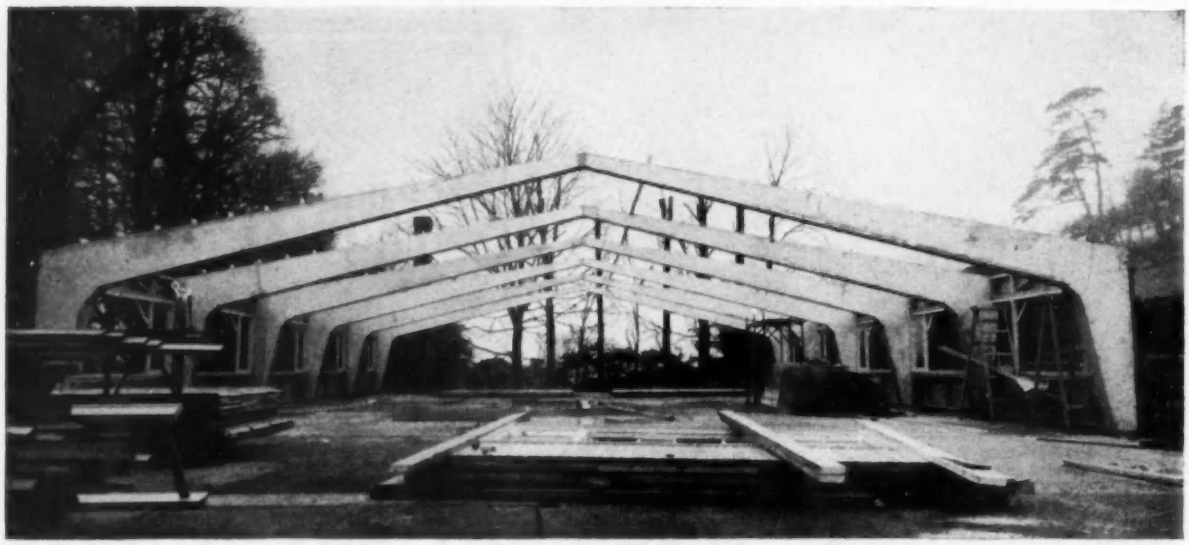

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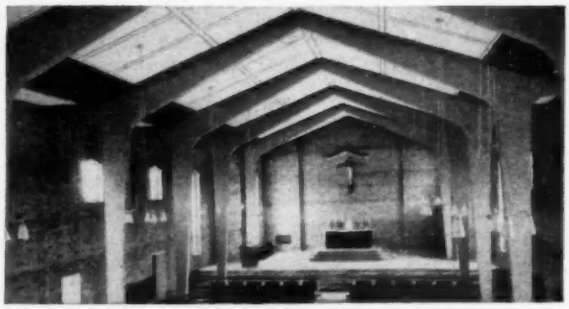

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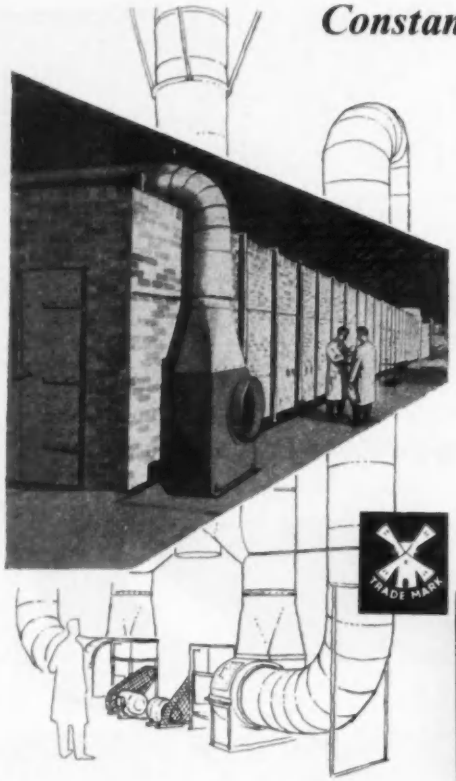

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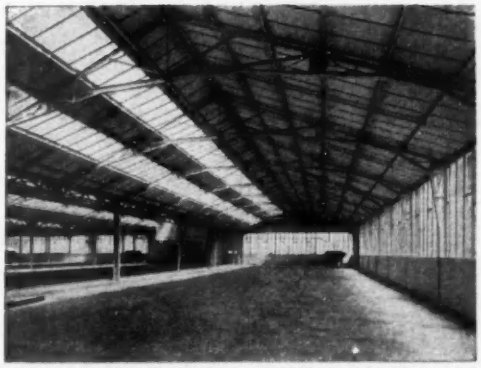

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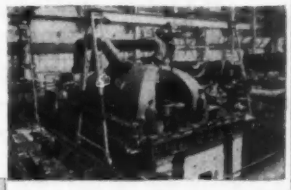

Photo shows 3-ton Capacity Special Colossus being used in steam turbine erection at the Erith Works of the General Electric Co.

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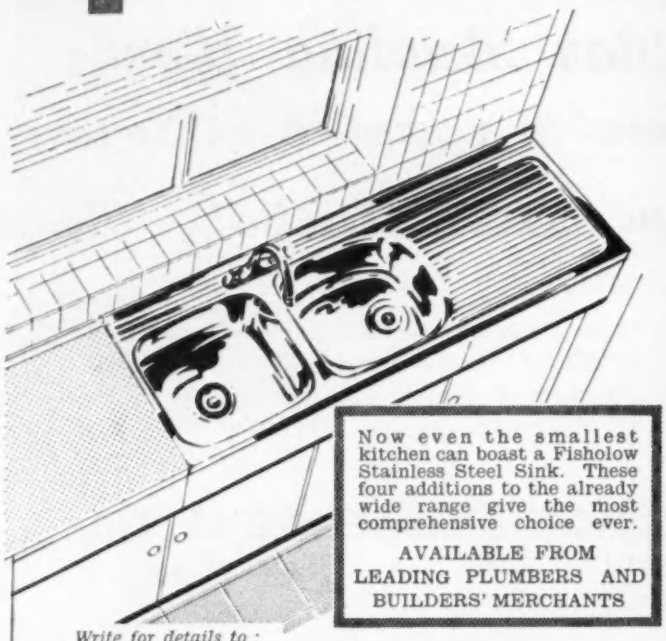

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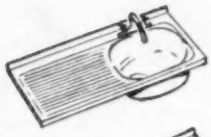

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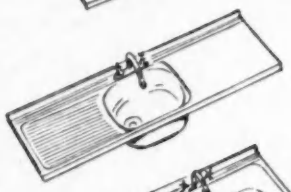

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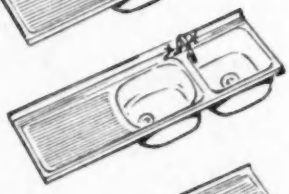

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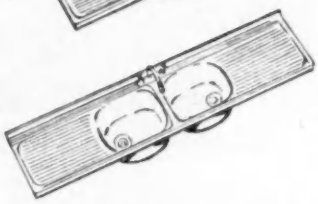

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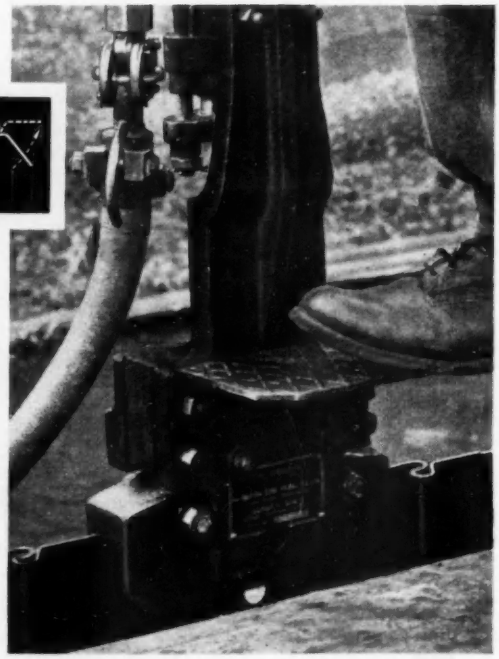

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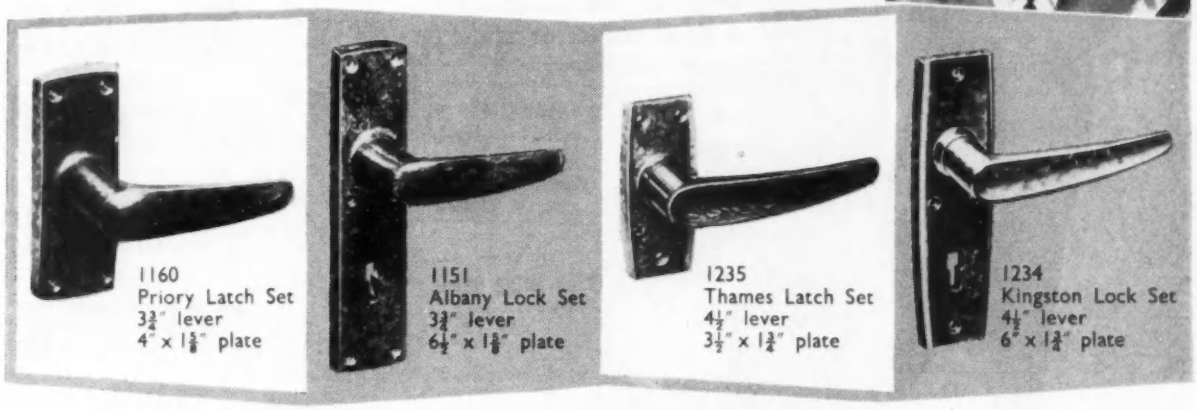

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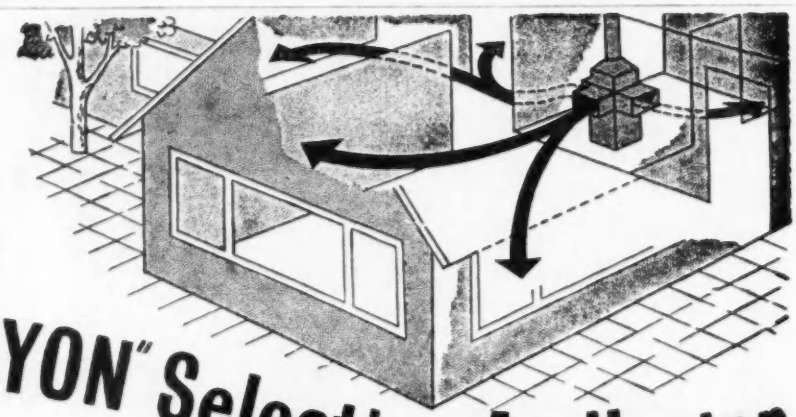

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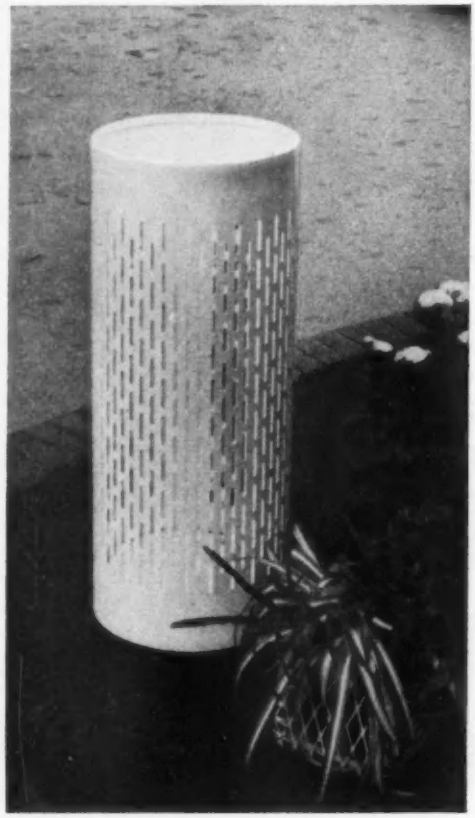

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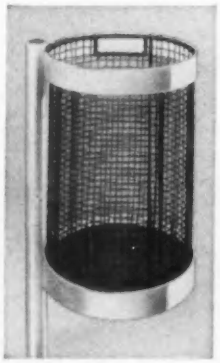

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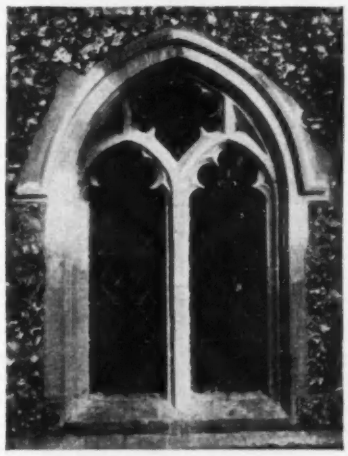

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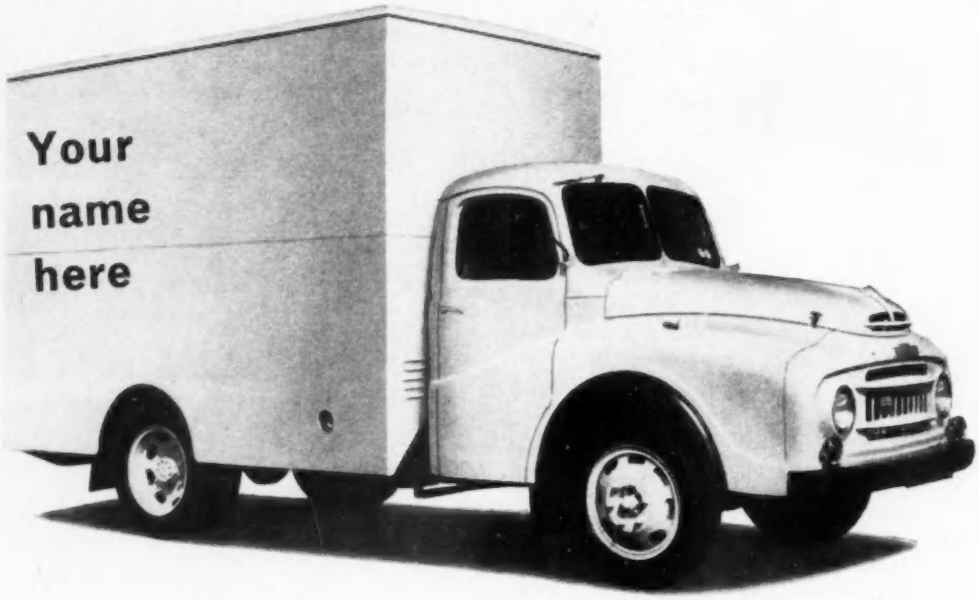

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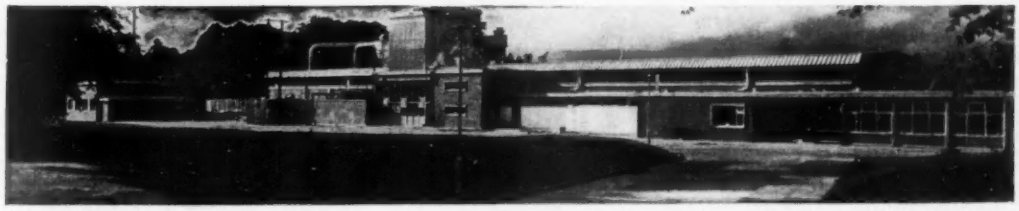

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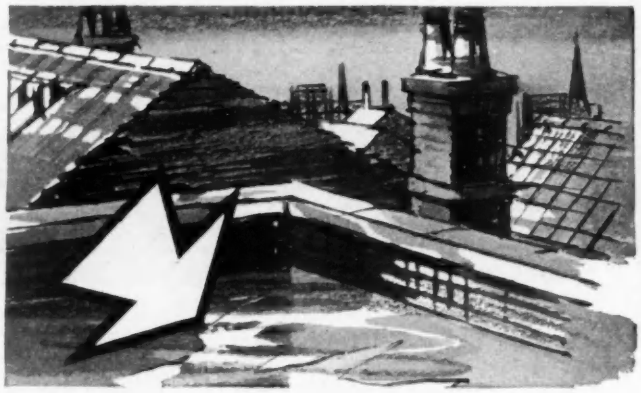

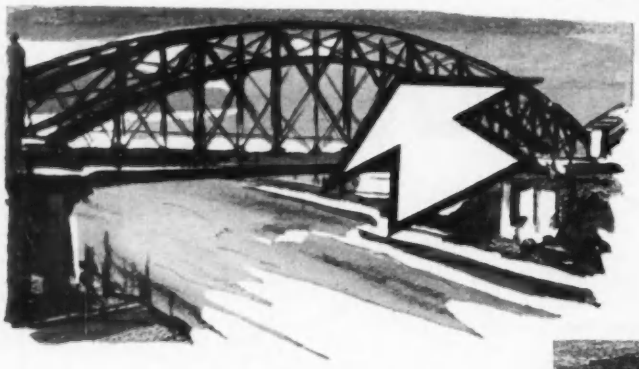

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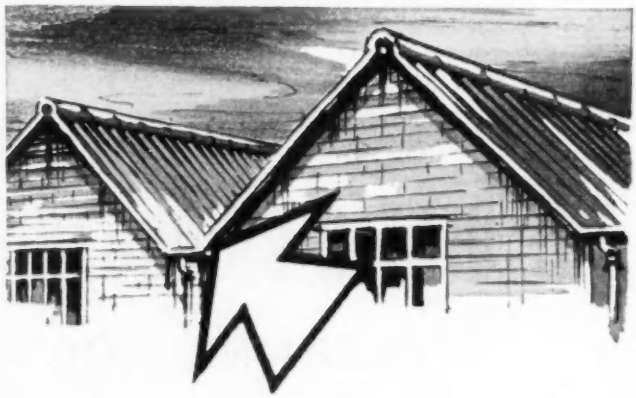

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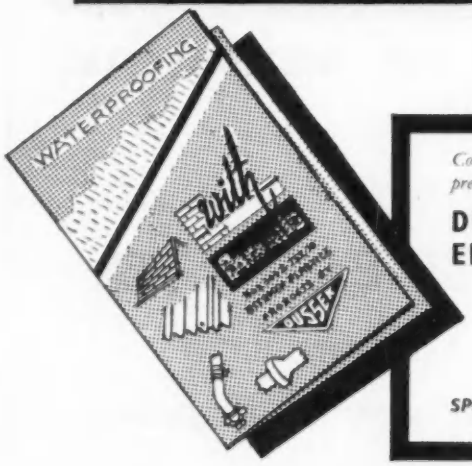

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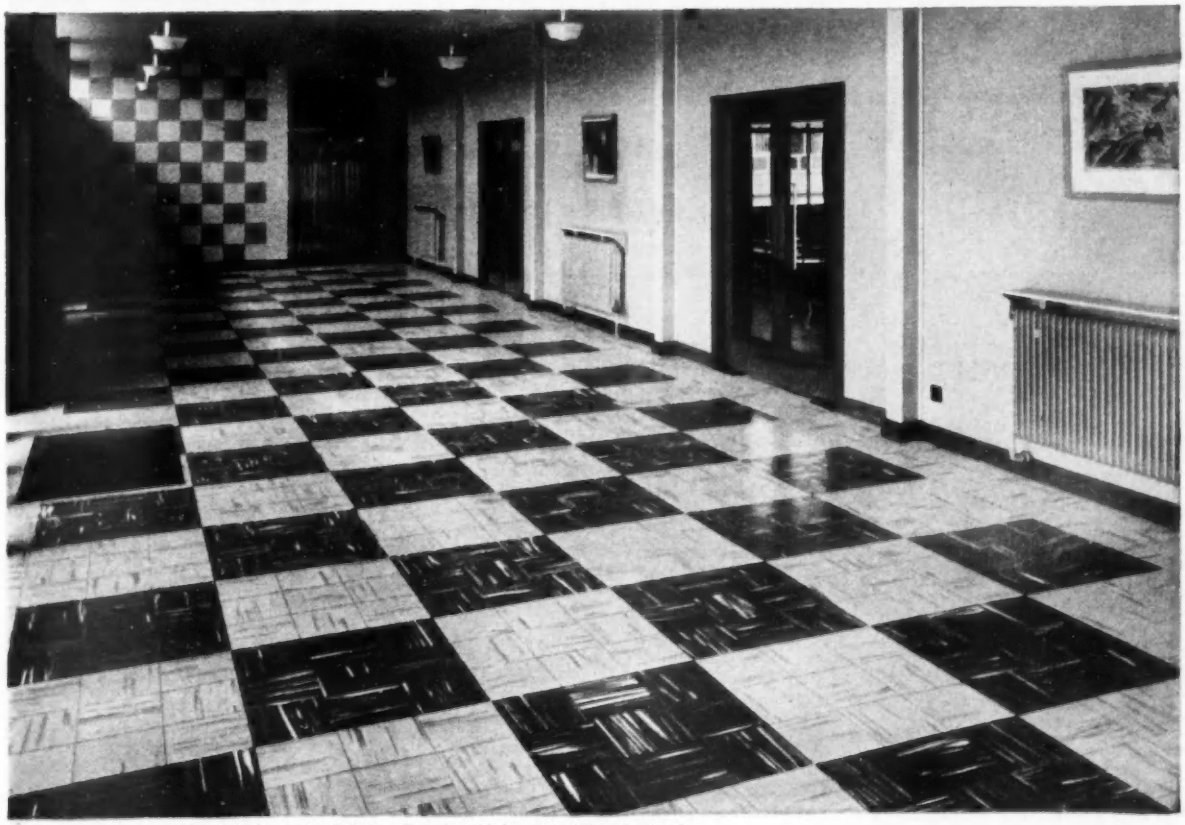

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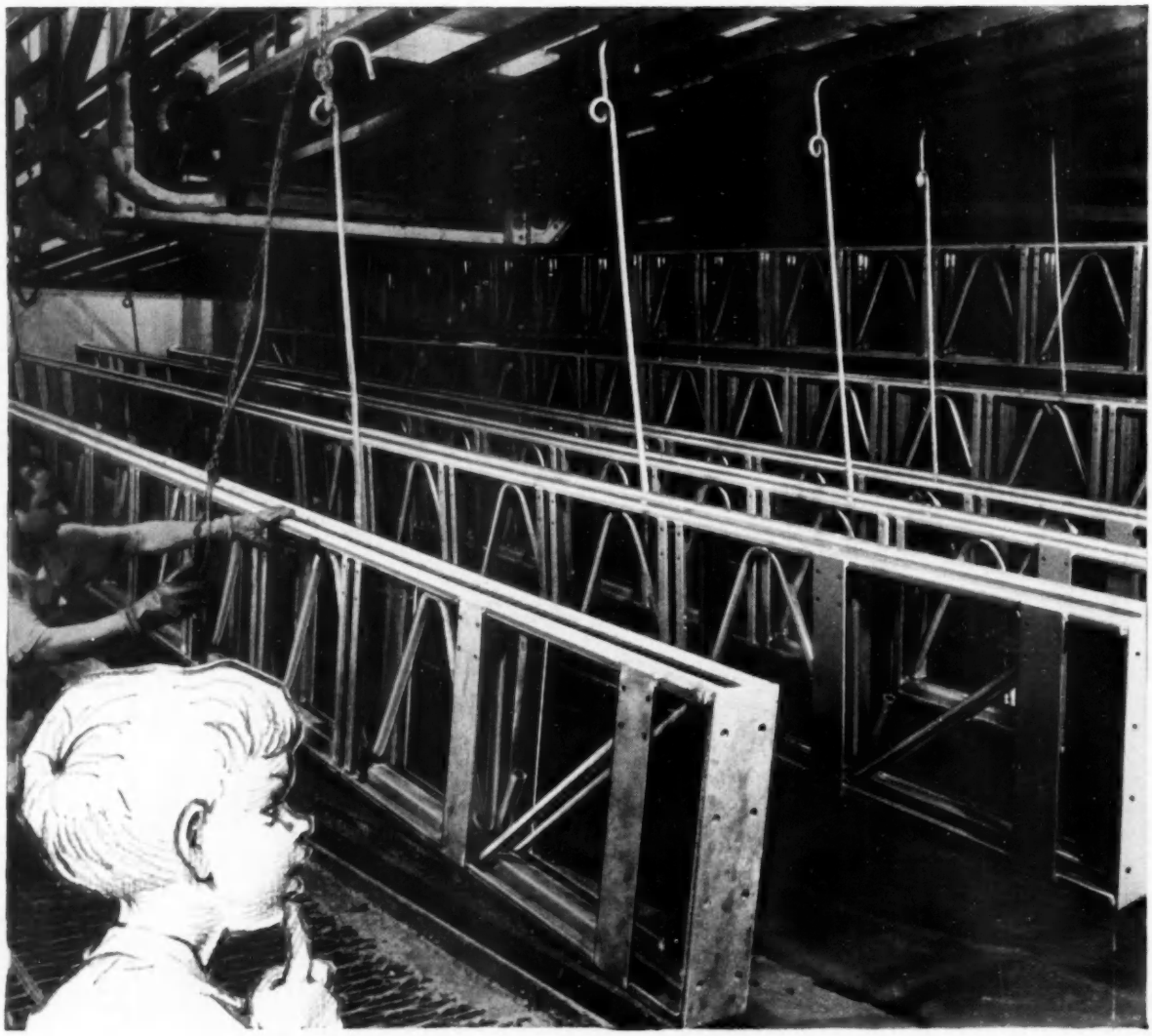

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We are particularly interested in (State H.P.) .....

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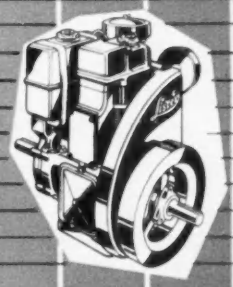
SELECTION CHART

B.H.P. continuous rating	MAINSHAFT SPEEDS IN REV/MIN. 750	850	900	1000	1200	1500	1800	2000
1·5	LD1							
1·7		LD1						
1·8			LD1					
2				LD1				
2·4				SL1	LD1			
2·9					SL1			
3	LD2					LD1		
3·4		LD2						
3·5							LD1	
3·6			LD2			SL1		
4				LD2				
4·25							SL1	
4·75								SL1
4·8				SL2	LD2			
5·8					SL2			
6						LD2		
6·6	VA							
7							LD2	
7·2				SL3		SL2		
7·5		VA						
8·5							SL2	
8·7					SL3			
9·5								SL2
9·6				SL4				
10·8						SL3		
11·5					SL4			
12				HA2				
12·75							SL3	
14·4						SL4		
15·5					HA2			
17							SL4	
18				HA3				
19						HA2		SL4
22							HA2	
23·25					HA3			
24								HB2
28·5						HA3		
33							HA3	
36				HA6				HB3
46·5					HA6			
57						HA6		
66							HA6	
72								HB6



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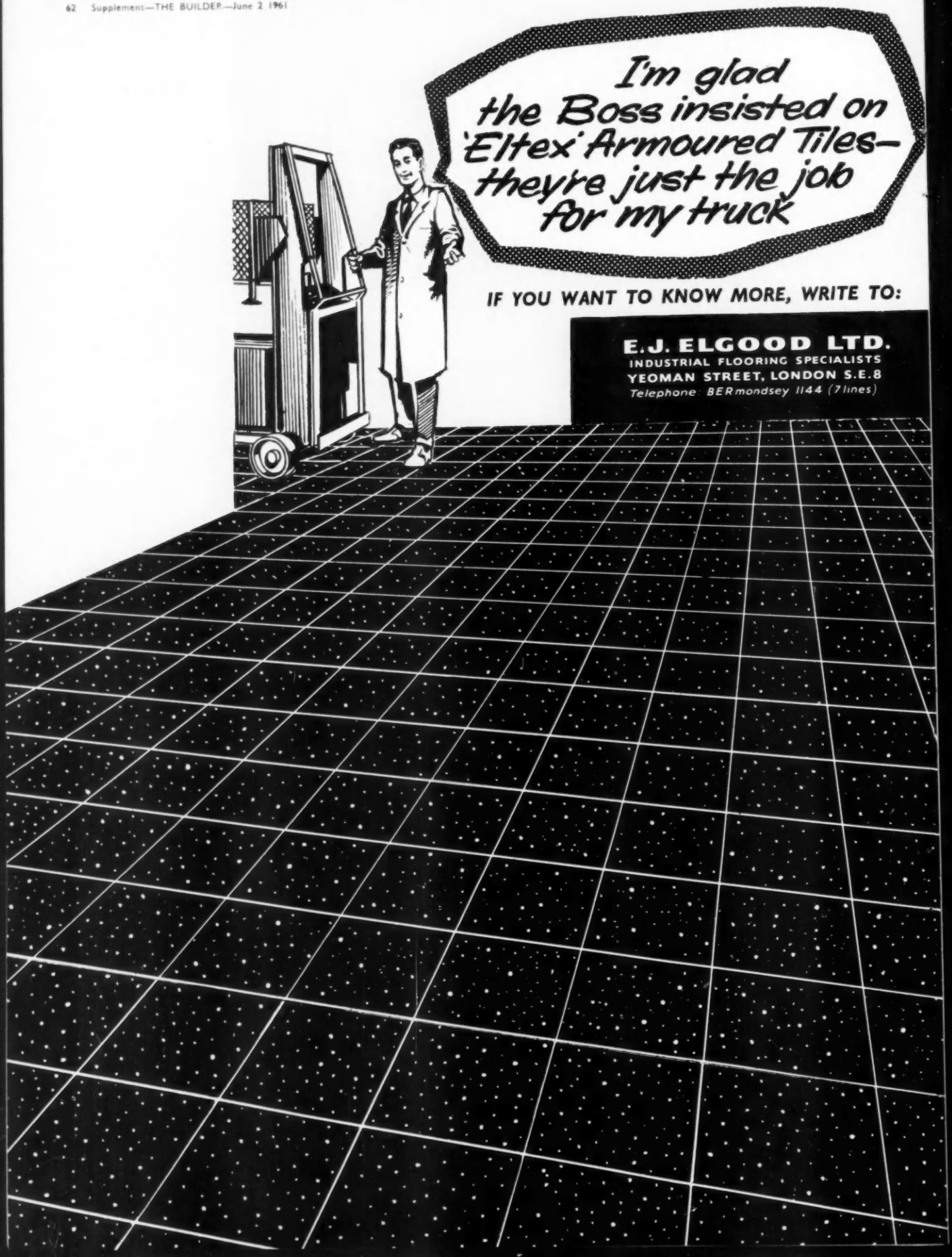
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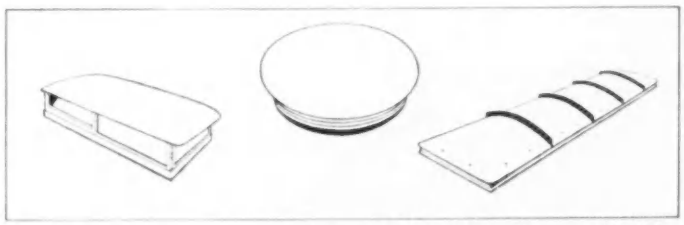

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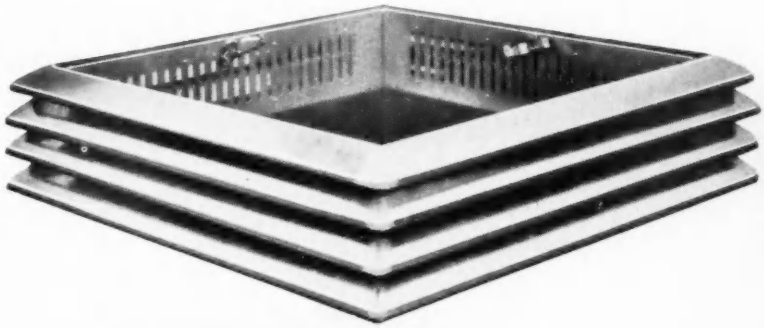

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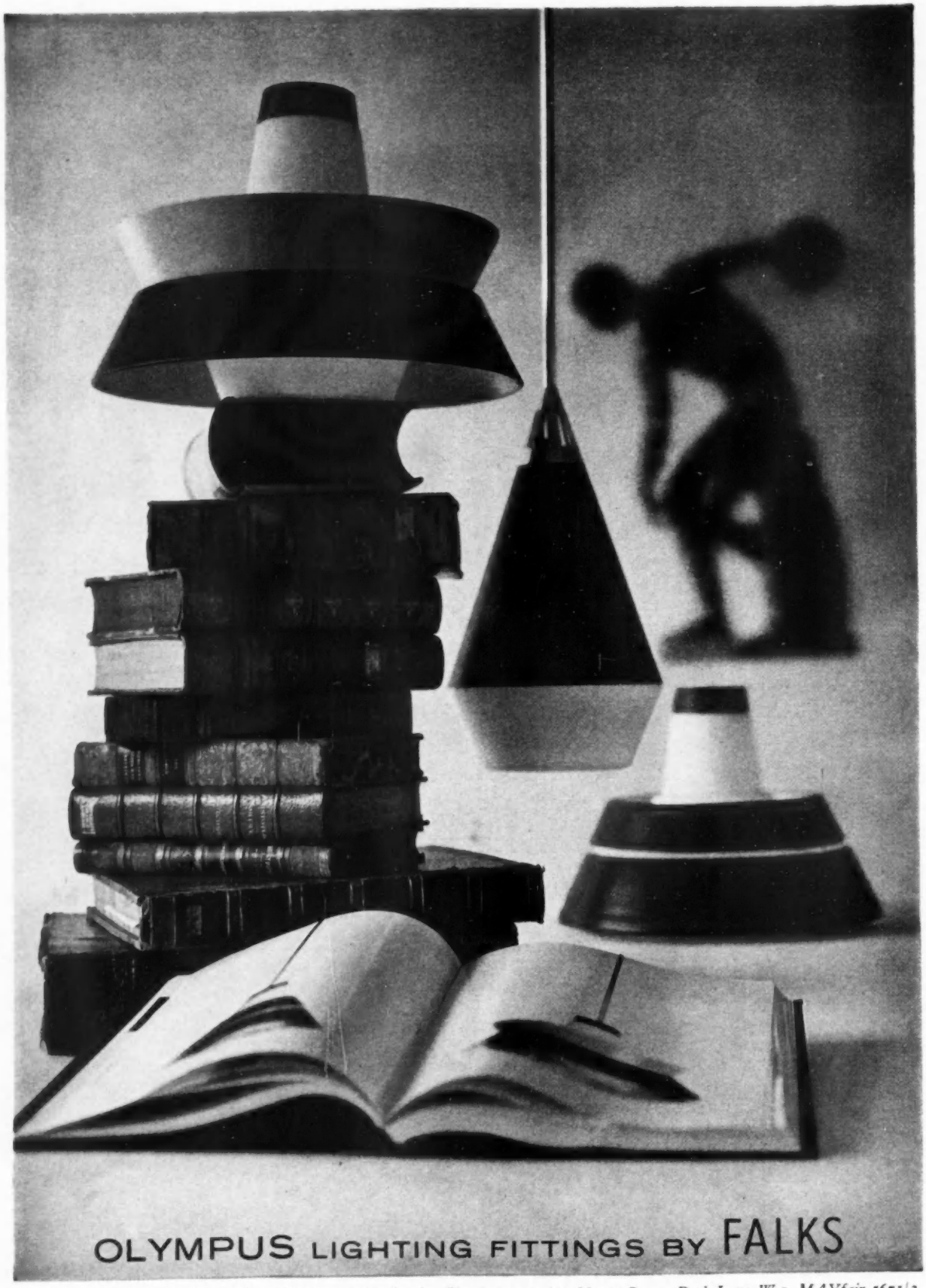

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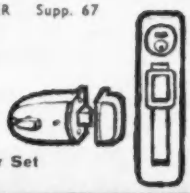
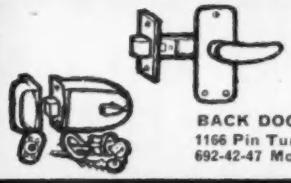
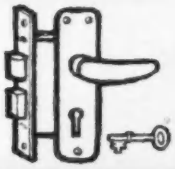


FRONT DOOR *
692-59-66 Postal Knocker Set



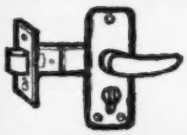
BACK DOOR *
1166 Pin Tumbler Deadlock
692-42-47 Mortice Latchset

* Front and Back Doors may be made to operate with the same key.



INTERIOR DOORS, DOWNSTAIRS
692-24-95
Mortice Lockset

BATHROOM DOOR
692-73-94
Mortice Lockset



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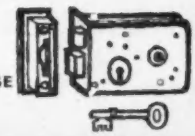

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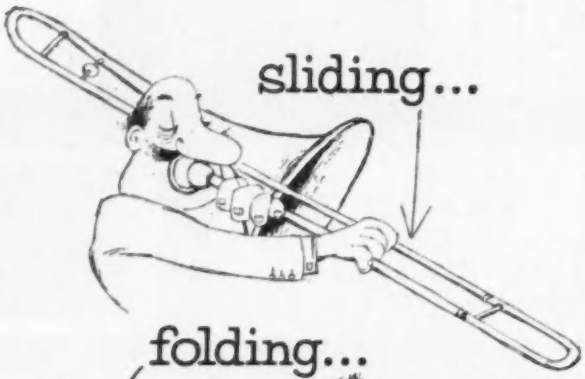

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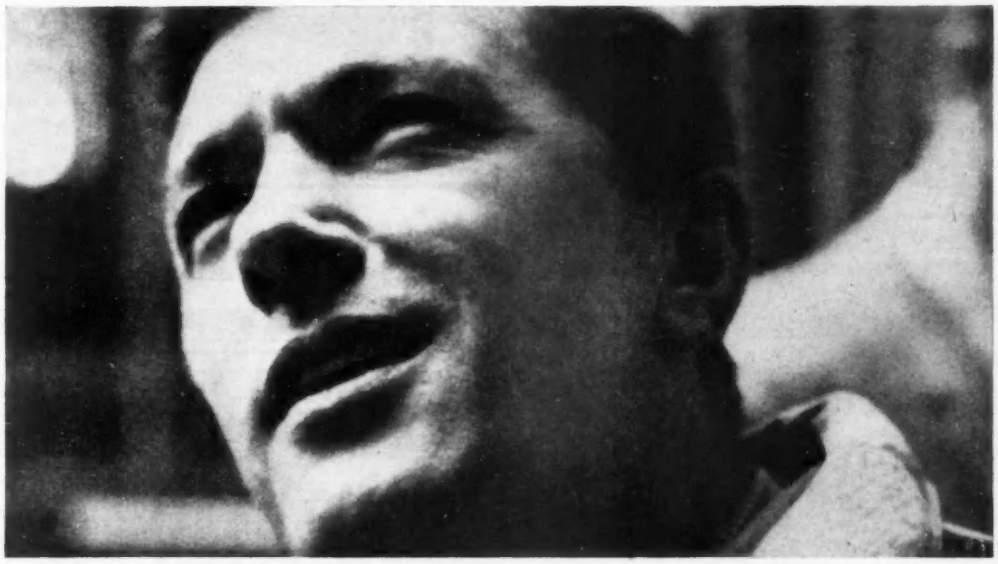

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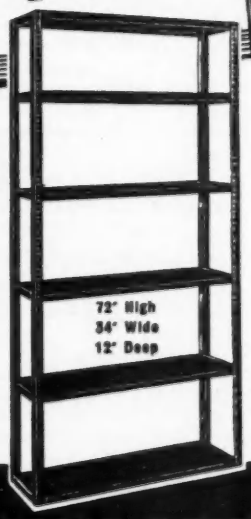

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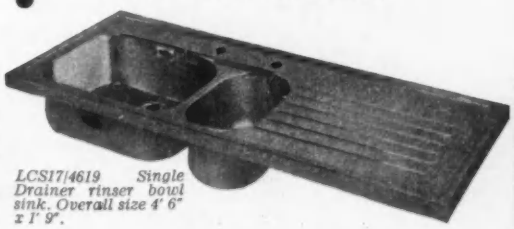
MS38SB/5319/T Double Drainer Slop Bowl Sink Overall size 5' 3" x 1' 9".



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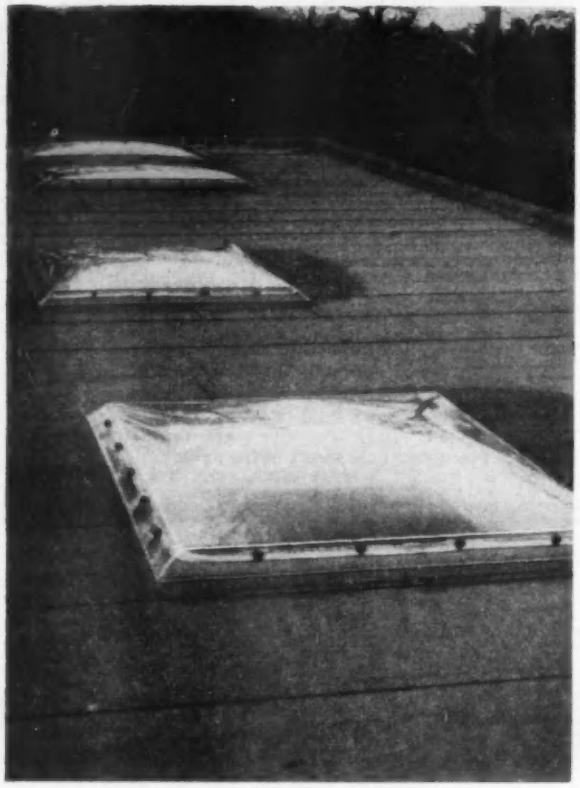
FINALLY–please send in for your form NOW and return with your entry *as early as possible*, so that we may visit the house if necessary. The closing date of entry is 21st July, 1961.

Post to: HOUSING AWARD COMPETITION, HOUSE BEAUTIFUL, 13/17 NEW BURLINGTON PLACE, LONDON, W.1

A tip worth having!

Lingfield 1961 COXDOMES the favourite



Some of the 94" x 70" Mark II Coxdomes installed over the Weighing-in Room at Lingfield Racecourse, Surrey, for the Racecourse Betting Control Board. Main Contractors, Messrs. Hoad and Taylor Ltd.

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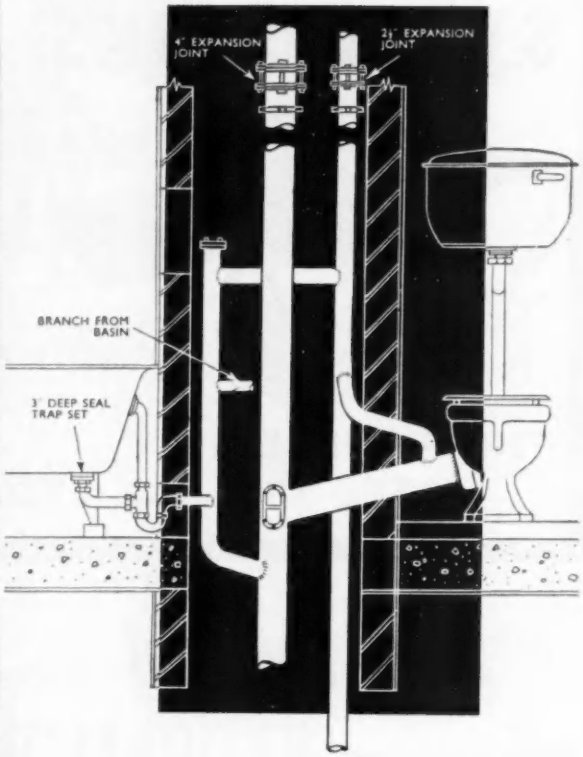
Planned plumbing



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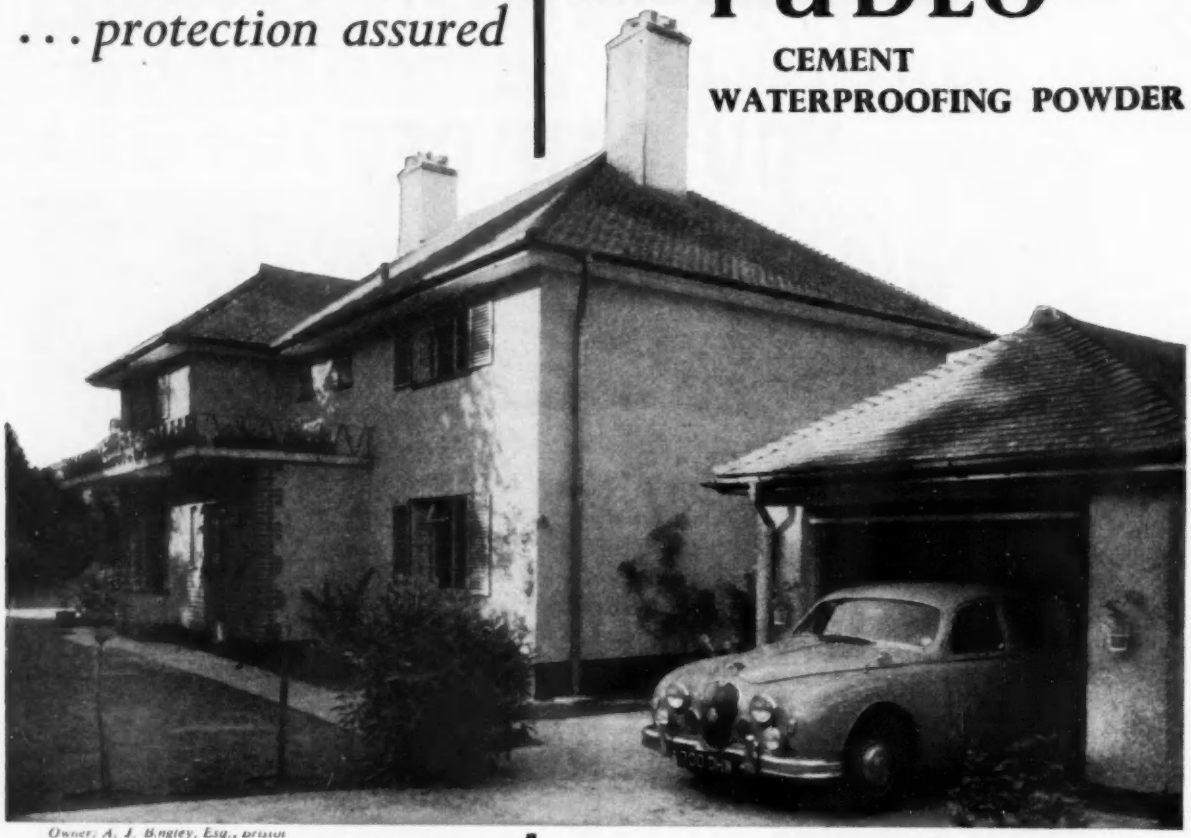

Owner: A. J. Bingley, Esq., Brixton
Architect: Major G. Raymond Morgan, F.I.A.A., F.I.A.S. etc.

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News

Summary

1031 A recent photograph is shown of Coventry Cathedral which is to be consecrated next year.

1032 Epping is the latest town to take advantage of the Civic Trust's assistance in rehabilitating its existing buildings and amenities.

1034 Manchester College of Building propose to start an experimental course of training for technicians in architecture to begin in September.

1040 Steps already taken by the Council of Industrial Design to ensure that products included in the Design Index (from which Design Centre exhibits are chosen) are functionally efficient are outlined in a statement.

1045 Revised plans by Sir Hugh Casson and Neville Conder for lecture halls on the Sedgwick-avenue site have been approved by the Regent House at Cambridge.

1048 A jury of leading American architects has selected seven recently completed buildings for the annual Honour Awards of the American Institute of Architects.

1049 The Allied Societies regional meeting at Leeds is the subject of a report by a special correspondent.

1051 A detailed code of procedure for contract variations has been worked out by Kent county buildings committee.

1052 Criticisms of recent planning practice were voiced on May 31 by Mr. Lewis Keeble in his address to the annual conference of the Town Planning Institute at Llandudno.

1056 The chairman of the Sheffield public works committee on May 19 answered criticisms of the cost and building time of the Park Hill flats constructed by the corporation's public works department.

'Late News' will be found overleaf, and 'News of the Week' on page 1045

Late News

Town Centre Redevelopment, Haddington

HADDINGTON BURGH COUNCIL is promoting a limited architectural competition for plans for the redevelopment of its town centre. Professor Robert Matthew, CBE, FRIBA, is assessor. This amends a notice given in 'The Builder' of May 19.

ASW Pay Claim

A SUBSTANTIAL INCREASE IN WAGES is to be sought by the Amalgamated Society of Woodworkers in November. This was resolved by the annual conference in Blackpool on Tuesday. Woodworkers, in common with all building operatives, get an increase in October of 6d. per hour and a working week reduced by 2 hours to 42 hours per week. The resolution stated that this was to avoid a repetition of 'the present 18 months' standstill.'

The conference also carried a resolution instructing the executive to resist any attempt to interfere with the present system of morning and afternoon tea-breaks. A further resolution carried was to the effect that future wages increases should be back-dated to the time of application.

NFBTE Half-Yearly Meeting

THE HALF-YEARLY GENERAL MEETING of the National Federation of Building Trades Employers is to be held at the Imperial Hotel, Blackpool, on July 13 and 14. On the first day, following a civic reception by the Mayor of Blackpool, the National President, Mr. Frank Russon, FIOB, will give a comprehensive review of the building industry, with particular reference to the Federation's activities and related policies. This will be followed by an open discussion in which it is hoped as many members as possible will take part. During the afternoon Mr. P. A. Stone, of the Building Research Station, will introduce the subject of 'The Economics of Plant Use.' This topic will be fully discussed in the light of the needs and problems of the small- and medium-sized firms as well as of the larger organisations. On the morning of the second day the Director of the National Federation, Mr. Peter Trench, OBE, will initiate a discussion on 'Profit Through Public Relations' and will stress the need for a carefully formulated sales policy on the part of every building firm.

LMBA Appointment

AN LMBA SAFETY ADVISORY SERVICE is about to be set up under Mr. J. H. Moss, OBE, safety advisory officer appointed by the Royal Society for the Prevention of Accidents in association with the LMBA. The safety service will come into operation this month.

The Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CC. June 2nd 1961 No. 6159

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Leading Articles

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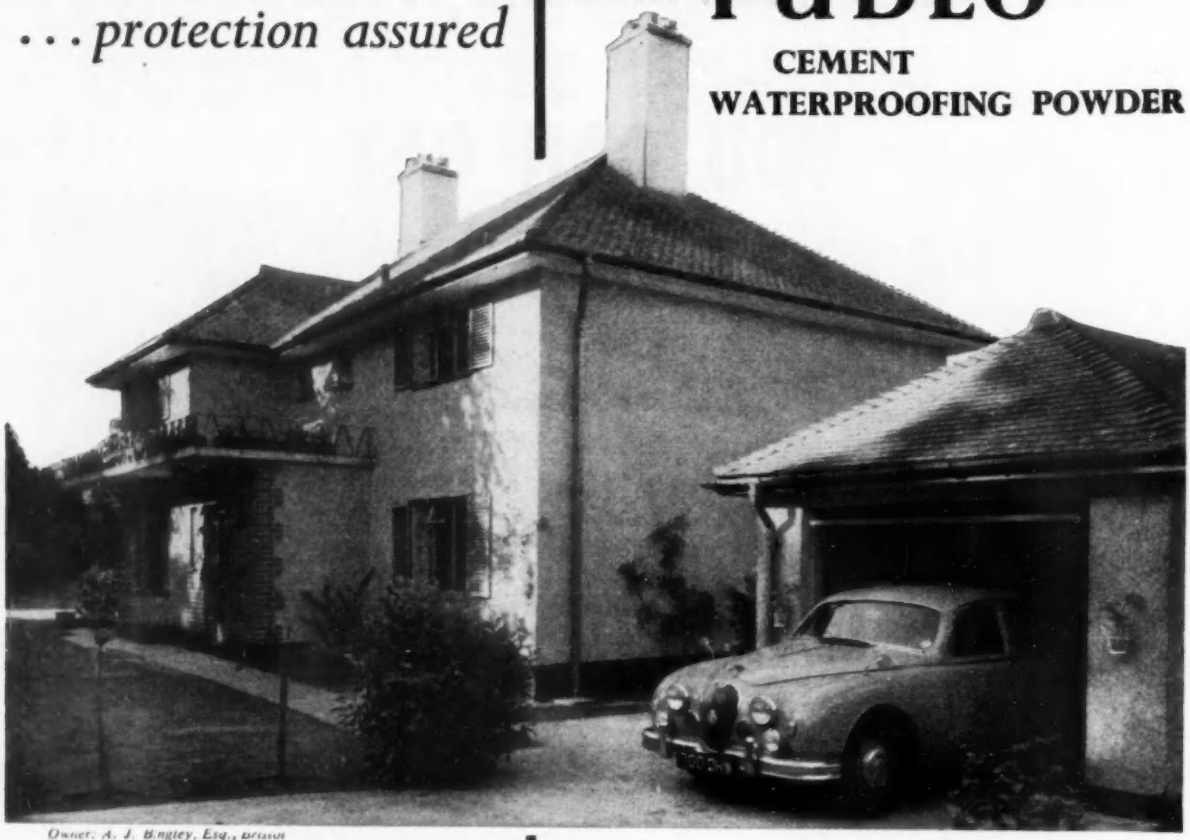

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'Special reference is necessary about "design,"' the

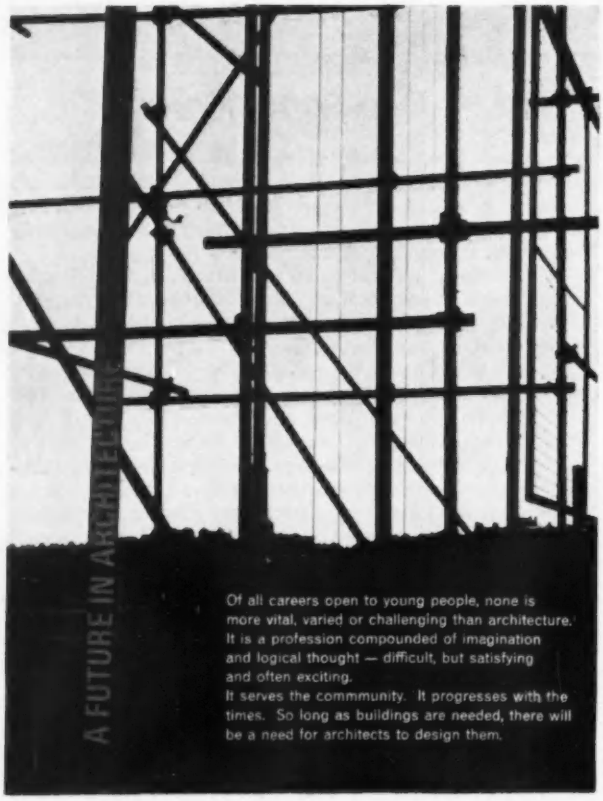
report continues, 'for various fears and hopes are held about this. At one end some would like to find a skill in the technician well developed because so much of building detail has "design content," while at the other there are fears that any such skill might be exploited by independent practice of a debased character. The training should produce a man of calibre in his own right sufficient to avoid this latter risk, and the course is not definitive about the former. The architect has no monopoly of the term "designer" and in fact relies on a great number in the industrial world. The direction taken by a student of such a course will depend much on what is evoked from him in the office to which he is attached and upon his native ability.'

This final observation puts a finger on a matter essential to the welfare of the two courses referred to—the intelligent and sympathetic support to be given by architectural and building firms (not forgetting the Architects' departments of local authorities, hospital boards and nationalised utilities) to the schemes. Some sacrifice on their part will be called for—in allowing staff enrolled for the courses time off for the necessary full-time periods. The results, nevertheless, should be rewarding to all concerned. We shall hope to see a quick and full response to Manchester's enterprise and, so far as the Technicians' course is concerned, the full backing of the RIBA given to this brave and timely proposal.

Survey of Architects' Offices

DETAILS of progress on the Survey of Architects' Offices now made public by the RIBA indicate that this inquiry may well prove to be one of the most useful pieces of research yet undertaken on behalf of the profession. The Survey, made possible by a generous grant from the Leverhulme Trust, seeks to establish what work is done in architects' offices and what the output of staff; what scale of fees is desirable and practicable; the fields of responsibility of various grades of staffs (and as a consequence what salaries should be paid); and whether the conditions in which architecture is produced are inhibited by influences within and without the office.

Below is an example of the posters prepared by the Royal Institute of British Architects for the Commonwealth Technical Training Week. The designs are by Mr. Jock Kinneir, FSIA, and Miss Margaret Calvert; the script by Mr. Miles Tomalin. In the main these excellent posters are intent upon encouraging a more inquiring mind towards architecture and construction



The stage now reached is that the Survey team, by devoted service, has personally visited a total of 71 offices both private and official, and has also conducted a postal inquiry on a larger scale of one in every five offices in England and Wales and Scotland. The response to the latter inquiry has been good, 80 per cent of official departments having complied and 40 per cent of private offices. The remarkable thing has been that there has been virtually no resistance by firms visited, many of whom have subsequently expressed gratification that the RIBA has undertaken the work and have acknowledged that the inquiry (which in every case has taken a full day and has engaged three or four members of the team) has set new ideas loose in the office, to general advantage.

Where now? The team is now busy collating results—a task which seems monumental but which is well under way—and hopes to place its report in the hands of the Professional Relations Committee by the end of August, after which it will go to the first convenient meeting of Council. It is emphasised that the team does not conceive as its duty to make recommendations, but only to give the facts as revealed by the survey. RIBA committees affected—notably the Practice committee, the Board of Architectural Education and Professor Robert Matthew's special committee on the technician class—will then use the data in formulating recommendations to Council, if thought to be desirable. Questions as to fees (including the matter of the composite fee for joint professional services, in which the Survey members found much interest in offices), salaries of assistants and the extent of the call for the creation of a new technician class, are only some that may arise.

The Survey Team, it is clear, would be among the last to claim that its findings will be fully representative of the average architectural office; in fact, the selection of firms visited has had a definite bias towards the efficient. The survey, moreover, is a sample one only, there being about 3,000 firms in private practice with a further 500 or so public or local authority offices. Those who hope for a picture of the average architectural office, therefore, will look in vain. But, from the facts now made known, it is already certain that a good picture of the major strengths (and major weaknesses) of offices both public and private will emerge, and this should provide the RIBA committees with the powder and shot to make an assault on inefficiencies and, no less important, on injustices to principals as well as staff. On current progress, as well as on being the first profession to undertake such a survey, the RIBA is much to be congratulated.

Notes of the Week

An Air of Expectancy; Apology to Travellers; Design Centre Awards; Australian Architect in London; Face Lift for Epping

AN AIR OF EXPECTANCY surrounds Sir Basil Spence's pink sandstone cathedral of St. Michael and All Saints, now nearing completion at Coventry. The position at present is that the superstructure of the nave has been built, the roof is complete, the porch is up to full height and the shuttering for the roof of the porch is now being erected. The floor is being covered with black and white marble slabs from Kellymount, in Ireland, and most of the stained-glass windows are in position. They include the five great pairs designed by Lawrence Leigh, Geoffrey Clarke and Keith New of the Royal College of Art; the huge Baptistery window, consisting of 190 separate lights, by John Piper; and the windows of the Chapel of Unity, shaped like a Crusader's tent, by Margaret Trehearne. The great tapestry depicting 'Christ in Glory' and 'Christ Crucified,' which has been designed by Graham Sutherland to hang behind the High Altar in place of an east window, is still being woven at Aubusson, in France. Sir Jacob Epstein's bronze group of St. Michael defeating the devil dominates the south wall.

* * *

DR. C. K. N. BARDSLEY, the Bishop of Coventry, on May 24 announced plans for the cathedral's consecration, which is to be followed by a great festival of the arts. This festival will be inaugurated from the cathedral with a concert comprising among other works two expressions of heroic resolve and nobility—the third Leonora overture and the Eroica symphony. The completion of Coventry Cathedral, in record time for such a project, will be a crowning achievement in the rebuilding of a city whose name has lent itself to a connotation of total destruction. The impressive Chapel of Unity symbolises the spirit in which this rebuilding has been carried out. Contributions, both practical and financial, have been donated from many sources outside this country, not the least being the beautiful mosaic floor of the Chapel itself and five small stained-glass windows at the eastern end of the north wall.

COVENTRY CATHEDRAL: *view taken from the old tower and showing the ruins of the old cathedral in foreground. The photograph is copyright of John Laing & Sons, Ltd., the contractors. Progress on the building is described in the first Note*

Apology to Travellers

MUCH IMPRESSED by the new mother church of the diocese, dominated still by the spire of its Gothic predecessor, and having walked through the cloistered precinct, visited the Bridge restaurant and the Belgrade Theatre, the writer then faced the depressing prospect of Coventry station. The embarrassment of British Railways must surely be without parallel. With the cathedral all but finished and rebuilding and redevelopment progressing apace under the initiative of a lively local authority, the city is still served by a temporary main line railway station. Having seen the error of its delays, however, the railway authorities are at last going ahead and the area is humming with furious activity to complete the station buildings in time to meet the large influx of visitors expected next summer. Local wags would hitherto have been better employed indignantly daubing the ageing notice of apology to travellers outside the station shanty than putting frothy detergents into the admittedly unimaginative water spout outside the Belgrade Theatre.

Design Centre Awards, 1961

THE COUNCIL OF INDUSTRIAL DESIGN'S exhibition of award-winners including its 'distillation,' the Duke of Edinburgh's prize for Elegant Design, has come round and by tomorrow (June 3) will have gone again, leaving a little less than happiness about it, writes BASIL MARRIOTT.

Again, I have thought criticism of the choice neither proper nor necessary, the jury having given their reasons, though their report does not get wide enough currency. The listing of their names, the products and their designers and manufacturers, has already been done in a previous issue (May 19).

There still remains a little to be said: not easily made constructive or unhurtful to people who may have become a bit trigger-happy (defensively or the reverse) about comment on what should be the CoID's most enlightening and stimulating survey; but in the event, and superficially perhaps, seems over-familiar and repetitive.

I don't think the implications of the monotonous 'best in whose opinion?' crack are viable. Though the jury are 'like' the Council and its staff—often having worked with, or for, them—they are after all 'like' oneself (if that is not presumptuous). They may fairly claim a wider-angle and working view of more fields of design application than even the enlightened layman, and are surely to be trusted on its principles.

* * *

ONE wonders, however, if the Council may not have reached a point where an embarrassing choice faces them—whether to go on or back. Remembering, if it is not a breach of privilege, a wise and clear-cut decision in early days to retreat from the jungle of dress-design (notoriously red in tooth and claw) as being not susceptible to any very rational approach, I wonder whether to go forward into the equally zany cross-currents of 'product engineering,' diametrically opposed but where a totally different conception of the act of design obtains, is practicable. If so, does this not entail combined assault in alliance with such bodies as the BSI, the consumer guidance (or protection?) bodies and many others?

All this comes to a point in 'the Duke's Elegance,' and here I feel surer in trying to sound a warning which could sound more Dutch-avuncular than I propose to let it. Like taste (which the Council, I think wisely, steers round) elegance is a very personal quality, intangible only until you see it, not to be taught, or produced on the drawing-

board. Things—and people—either have it, built-in and intrinsically, or they haven't. The table mirror, in my and apparently others' opinion has—though too small for anything but make-up or tie-straightening. The transistor radio is a *proxime accessit:* though how much more elegant, if only for its element of strangeness, is the clear-plastic-cased demonstration model. It was only afterwards that I wondered whether one could hear through anything but the perforated larder-window mesh or louvres which now make things all look so alike—and (more significantly) whether one really cared if one couldn't.

Manchester Building Honours Degree

SO CONSIDERABLE IS THE DEMAND for graduates who have taken the Honours course for the degree of Bachelor of Technical Science in Building, that the Manchester College of Science and Technology (whose Professor in Building is Dr. Denis Harper, BArch, FRIBA) cannot meet it, we learn. The new course which has been running now for two years is finding much favour with industrialists. Another course will be commencing in the autumn, and applications for vacancies which still exist should be sent as soon as possible to Dr. Harper.

Australian Architect in London

IN LONDON recently, at the end of a 4-month tour of USA (where he has seen Patrick Horsbrugh), Canada, the Continent and England was R. P. Murray, partner of Sir Arthur Stephenson, of Sydney. Mr. Murray, who spent some time after the war in Sir Thomas Bennett's office, tells us that his principals hold firmly to the belief that their senior architects should get abroad every few years to refresh their knowledge and prevent staleness. He himself has been studying precast work, especially in USA where great strides are being made in reinforced concrete—a change of front caused by the not infrequent hold-ups in steel supply arising from steel-makers' strikes. American work in this field is of a very high quality, he says.

The package-deal is nothing like the menace in the States as it appears to be here, Mr. Murray believes. This is because the American architect enjoys a high degree of confidence from his clients who rely on him for economic as well as technical advice. British architects must strengthen their hands in this direction, he thinks, if they are to challenge successfully the package-dealer. The quantity surveyor is not making much progress, it seems, either in the States or in Australia where he is used more as an estimator than as a controller of costs. He tends to be employed in an estimating capacity both by the architect and the builder, though in Australia there are quite a number of independent offices, some of them branches of English firms.

Mr. Murray also believes that the time is at hand when training for a technician class must be provided. He sees nothing derogatory in the establishment of such a profession which must come, he believes, if architectural offices are to cope with the flood of work.

* * *

IN AUSTRALIA, as everywhere, the job of keeping on top of technical information is a constant source of worry. 'But we file everything of interest as it comes in' said Mr. Murray, 'unless it does not conform to standard size; then, regardless of its value it goes straight into the wastepaper basket.' Manufacturers, please note!

Face-lift for Epping

EPPING is the latest town to take advantage of the Civic Trust's assistance in rehabilitating its existing buildings and amenities at comparatively little cost. The new scheme for the improved High-street was officially opened last Saturday (May 27) by the Lord Mayor of London, Sir Bernard Waley-Cohen. The result is that Epping still retains its character as a small market town on the outskirts of London, but now it looks smart and well-cared-for rather than neglected.

When, in the winter of 1959, it was asked to assist Epping in undertaking a street improvement scheme, the Civic Trust realised that this was a challenge which differed in many respects from schemes already completed or under way in Norwich, Croydon, Burslem and Windsor. In the first place, previous schemes had involved only one of several commercial areas in the various towns, but Epping proposed to rejuvenate its whole shopping area. Moreover, Epping was interesting in that it had shown that the creation of a new town nearby (Harlow) could be a spur to improvement rather than a cause for despondency. But perhaps the most significant aspect of the Epping experiment is that it is the first scheme completed where the county council has given substantial assistance—by a financial contribution of 40 per cent of the co-ordinating architect's fees, by undertaking the whole of the photographic survey and by sending several representatives and officers to assist in the work of the joint committee. It is to be hoped that other county councils will see the point and give help to similar schemes within their boundaries.

* * *

MR. JOHN L. GREENWOOD, ARIBA, of the Civic Trust, was the co-ordinating architect, helped by a panel of architects selected with the assistance of the Essex, Cambridgeshire and Hertfordshire Society of Architects. The scheme involved 140 properties and only in five cases were the owners totally unable to co-operate in addition to a few cases where rebuilding was in progress. The majority of buildings have been completely redecorated, and many have had new shop fronts. All seats on the greens have been repaired and repainted, new litter bins of improved design provided, returfing undertaken and unnecessary railings and undergrowth cleared. Two new bus shelters were designed by the Civic Trust and built with the co-operation of the TDA. In addition to the benefits accruing to its inhabitants, Epping is seen each year by many thousands passing through it on the main A.11 road, some of whom at least, it may be supposed, will take steps to see that this latest example of the Civic Trust's work is followed in their own towns.

Norfolk and Norwich Architects

THE CURRENT HANDBOOK of the Norfolk and Norwich Association of Architects continues the trend of well-produced annual reviews that are now published by the Allied Societies and their branches throughout the country. In his Foreword, the 1960-61 president, Mr. A. W. Ecclestone, points to the closer liaison between Norfolk and Suffolk architects as being the most outstanding item of the year, thus spotlighting the Association's commendable contribution to one of the explicit aims of the Allied Societies Conference. Infusing historical and current interest in a publication, which by its nature must contain the Association's rules and routine business, the editor has included some interesting notes on cast iron in Norwich architecture, contributed by A. Paget Baggs, and extracts from the Norwich Traffic Report, 1959, by the Norwich Society.

Finally, there is a tribute to mark fifty years' membership of the RIBA of Mr. Ernest Buckingham, described as a very remarkable young man who, at the age of 87, has the reputation of being the oldest practising architect in the country. He is a founder member of the Association—long may he flourish.

Poet's Corner

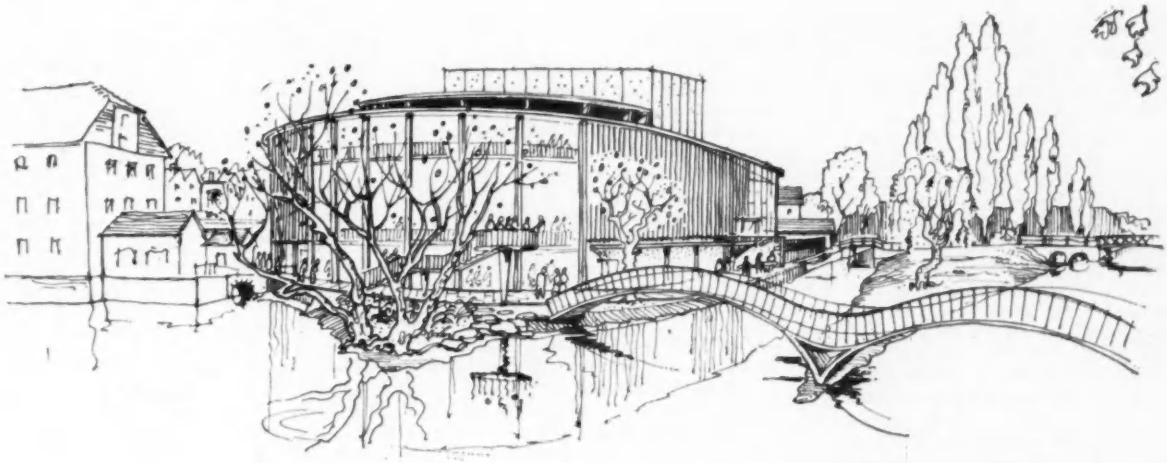
FIRST TENANTS of the new hotel now under construction in Park-lane are a blackbird and his mate who are rearing a family of three. The nest was found a fortnight ago by an employee of the contractors, the Token Construction Co. Ltd., whose staff photographer took the picture.

With all the Park from which to choose,
A blackbird flew to Market Mews.
The hotel's site, his *rendez-vous,*
Foundation plans to quietly view.
Reservations are *such* a problem,
With Tom, Dick, Harry a-booking of 'em.
So he and mate brought tools of trade,
With quick construction they made the grade,
By reinforcement quite surrounded,
Their cosy nest with joy abounded.
They settled in with anxious speed,
And now have three more mouths to feed.
So, in the Park they brag each day,
Of 'our hotel across the way.'

JANE BUCKLE.

Yvonne Arnaud Theatre, Guildford

SCOTT, BROWNRIGG AND TURNER, architects



entrance bridge and elevation to public rooms

THIS NEW THEATRE, seating 550, is to be built on a bank of the River Wey at Guildford, and the borough council have provided a site near the mill pool and town bridge. The cost is estimated at £200,000, and a public appeal is being launched to raise funds for the building which is to be a memorial to Miss Yvonne Arnaud, who was a founder-director of the present Guildford Theatre Club.

The theatre virtually rises out of the River Wey, surrounded on almost three sides by water. The site is a rough triangle, the tip of an island jutting out into the old mill pool.

To fit this site, the architects have designed a horse-shoe plan, the flat side forming the stage, and foyers and public rooms extending around the arc with a panoramic view of the river.

The main entrance will be across a bridge from the new Quarry-street relief road, and an arched footbridge in two spans will link the island with Millmead and the bus and railway stations.

There is no room for a large car park on the site, but there will be plenty of space for cars in the Quarry-street park and across the footbridge in Millmead.

The auditorium, seating 550 in raked stalls and circle, is almost round, giving a close intimacy with the performance and an excellent view of the stage.

The stage itself is large, with generous wing space. There will be no proscenium as such to form a barrier between audience and actors, but a false proscenium can be used with traditional stage settings. The apron stage can be extended to bring the actors right into the middle of the audience for modern productions.

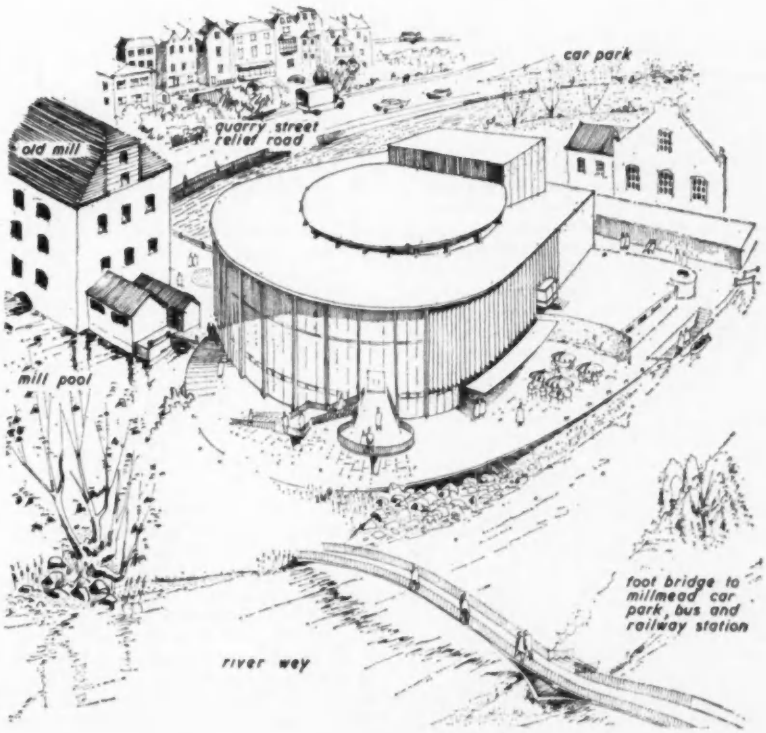
The foyer at first-floor level will be the main public space. Comfortably furnished and provided with a first-rate bar, this will be the social centre for Guildford's theatregoers.

The theatre club-room above will provide more private facilities for theatre club members. It will have its own kitchen and toilet accommodation.

There is to be a large restaurant at ground-floor level on the south-west with a sunny water-side terrace, aimed at giving continental standards of comfort and cuisine.

Mooring facilities will be provided for those arriving for refreshment or entertainment by boat.

An al fresco open-air café is planned on the grassy adjoining island.



Technicians in Architecture

Manchester to Inaugurate 4-year Course

WITH THE APPROVAL of the Council of the Manchester Society of Architects, the Manchester College of Building, in association with the Regional College of Art and the College of Science and Technology, propose to start an experimental course of training for Technicians in Architecture.

This course will be of four years' duration—the first, second and fourth years being part-time, and the third year full-time. The part-time training includes one day (including an evening) of full attendance per week. The minimum standard of entry is four Ordinary level GCE subjects, including English language, mathematics or a science subject, and two from a general list, but excluding craft subjects; or a City and Guilds Full Technological Certificate (revised scheme).

Only students who are engaged with a practising architect, or an approved firm in the building industry, will be eligible for this course. It should be noted that the course is intended for those students who do not hold the entrance qualifications for training as architects, but who wish to work in Architects' offices as assistants.

Applications for enrolment should be made to the Principal, Mr. J. Holt, BSc, Manchester College of Building, Hardman-street, Manchester, 3, on September 11 next, between 9 a.m. and 4 p.m. The course will begin on September 18.

A Scheme of Training

The course is the result of a report of technicians set up by the Manchester the sub-committee on the training of Society of Architects which announced its findings last January. The proposal to the committee (which outlines a prototype syllabus) is as follows:

'On the assumption that it is established that a valuable class of assistants—unqualified or partly so—does exist, and that there is strong opinion that this class should be recognised and fortified by the RIBA, it is suggested that new courses for Technicians in Architecture might be inaugurated in existing Colleges of Technology associated perhaps with Colleges of Art. At the successful conclusion of the course the student will acquire some standing in the RIBA, and the exceptional student might be permitted to bridge the normal entry levels into architecture.

'A prototype course has been designed to meet the assumed requirements of the technician. . . . This course will obviously be subject to variations caused by the facilities available at various schools. The course is a sandwich course, and the merit of the proposed "timing" arrangement lies in sponsorship in an architect's office, and the fairly slow development of studies in the two early part-time years, by the end of which firms may be very willing to support the students through their full-time year. Some students may wish to transfer from the full-time architectural courses, and the timing of the courses will allow for the necessary arrangements for office sponsorship to be made.

'The details of the course given allow an assessment of the kind of person who would be produced, and how valuable he may become in the architectural team. About a quarter of his time would be spent on geometry, mathematics, freehand and graphical presentation, and applied physics and chemistry related to light, heat and sound, electricity and materials. Over a third would be spent on structural design, construction, services, surveying and workshop technology, and one sixth each would be on professional matters (law, quantities, estimates, management), and liberal studies, some of which would be general and some dealing with history and design.

'As compared with architectural courses, it would almost entirely omit training in planning and design. On the other hand, it would carry structures, construction, building science and equipment beyond what is commonly found at present, and deal more closely with quantities and office management. The liberal studies would in some senses be broader than most architects get, but history and theory of design would be developed primarily to bring about a sympathetic comprehension of contemporary design. Thus in the technical and practical field it comes up to Intermediate level, and frequently much beyond, even to Final stage, incorporating an amount of post-Intermediate professional material. It adds two or three features such as certain aspects of surveying, site production, workshop studies, making and use of models, cost control and office management.

'In sum, the student technician should develop a strong technical bias, with a comprehending and critical outlook about communications to the site, draughtsmanship, and about those aspects of building which figure prominently in working drawings. He will be interested in efficient administration, while maintaining a sympathetic attitude to design values.

'Special reference is necessary about "design," for various fears and hopes are held about this. At one end some would like to find a skill in the technician well developed because so much of building detail has "design content," while at the other, there are fears that any such skill might be exploited by independent practice of a debased character. The training should produce a man of calibre in his own right sufficient to avoid this latter risk, and the course is not definitive about the former. The architect has no monopoly of the term "designer" and in fact relies on a great number in the industrial world. The direction taken by a student of such a course will depend much upon what is evoked from him in the office to which he is attached and upon his native ability.

Qualifying as Technical Graduate RIBA

'It is suggested that the RIBA should permit the student technician to become a Student RIBA (present Probationer), when he has successfully completed his second year and is entering his full-time year. After completing the fourth year the Student will be qualified to become a Technical Graduate RIBA.

'Outstanding students may be recommended for a qualifying year in architecture at the successful conclusion of the third year if they have:

(a) a consistently high examination record 65-70 per cent; and

(b) an obvious design potential; and

(c) a strong recommendation from the sponsoring office.

'Those recommended for the qualifying course shall sit for a supplementary examination in Design, and if satisfying, will be regarded as reaching the equivalent of the 'A' level required for direct entry into Architecture, and permitted to attend a full-time qualifying (or conversion) year at one of the Recognised Schools where their work would concentrate upon design studies and practice; after this year, two normal advanced years in the recognised school would lead to the final examinations and qualification as an Associate.'

Summary of the Course and its Purpose

THE CITY OF MANCHESTER Education Committee, through the Manchester College of Building, has issued the following summary of the course and of its purpose:

DURATION OF THE COURSE: 4 years; years 1, 2 and 4, part-time (8 hours per week), year 3 full-time (27 hours per week).

CONDITIONS OF ENTRY: Intending students should have passed the General Certificate of Education Examination at Ordinary level in English language, mathematics or a science subject, and in two other subjects (excluding craft subjects); or they should be holders of the Full Technological Certificate (revised) of the City and Guilds of London Institute or some equivalent technical qualification. In addition they should be employed in the office of a practising architect and should be sponsored by him.

CURRICULUM:

1st Year (part-time). Geometry, Mathematics, Structures (theory and design), Building Construction, Liberal Studies, Building Science.

2nd Year (part-time). Building Science, Structures (theory and design), Building Construction, Services and Equipment, Surveying and Site Inspection, Liberal Studies.

3rd Year (full-time). Geometry, Mathematics, Building Science, Structures (theory and design), Building Construc-

tion, Services and Equipment, Workshop Technology, Liberal Studies, History and Theory of Design, Quantities.

4th Year (part-time). Surveying and Site Inspection, History and Theory of Design, Law, Estimates and Cost, Office Management.

EXAMINATIONS: Examinations will be held each year. Successful students will, at the end of the course, be given a College Certificate. At some time during the course, there will be an oral examination and students will be expected at the same time to submit a portfolio of work.

GENERAL INFORMATION: The purpose of this course is to provide a qualification, which will be recognised by the Manchester Society of Architects, for those who desire a career in architecture but who are unable to attain full professional status, either because of their inability to obtain the Advanced level passes required by the RIBA or due to their failure in the early years of a professional course. It is expected that students who complete this course will continue to work in architecture and that they will ultimately be recognised, and employed, as senior assistants to architects.

It is expected that certain parts of the course will be offered at the Regional College of Art and the Manchester College of Science and Technology. Intending students will find information regarding enrolment dates, permit regulations, etc., in the Prospectus, copies of which will be available in August.

University of Manchester

One Year Part-Time Course in Building Site Technology and Management

THE DEPARTMENT OF BUILDING in the Faculty of Technology of the University of Manchester proposes to inaugurate an advanced course for the technical management staff of the building industry. It will permit study of the advanced techniques of site mechanisation and management and will coincide with the new examination structure of the Institute of Builders and give adequate preparation for part II of the final examination for the Associateship.

The entry qualifications are a university degree in building, engineering or architecture, or Higher National Certificate or Diploma held in these subjects, or professional qualifications in similar disciplines.

The course will be arranged to permit the inclusion of two separate months (November and February) of full-time attendance and study together with 19 weeks of part-time lectures involving two hours on two nights per week. For students not living in the region, it would be possible to attend for the two full-time months only, and cover the part-time work in a local technical college or by private study.

Entry forms for the course will be available from the Department of Building, the Manchester College of Science and Technology, Manchester I, at the end of August, next, together with details of registration and fees.

Letters to the Editor

Private Architects and Official Work; Training for Site Management

SIR,—In your anxiety to persuade the proper use of private architects for local government projects you imply (in your leading article last week) inefficiency, if not worse, in local government architects' departments. Do you really believe that borough treasurers, the businessmen serving on local authorities' councils and the District Auditor are all so naïve as to accept departmental costs which do not include all the overhead charges you list? And are there those who still believe that because a member of the profession elects to practise in an official office he is 'ipso facto' a less good architect?

There are plenty of sound reasons for the engagement of private professional services to supplement official offices without the need to resort to generalisations about alleged inefficiency in local government architects' departments. Far from advancing your cause, your article is calculated to harm the good relationship which exists between many an official office and the private architects who work in association with it.

P. F. BURRIDGE [FRIBA],
Borough Architect, Southend-on-Sea.

* * *

SIR,—Your leader, 'Private Help or Official Expansion?' will be deeply appreciated by private architects everywhere, and, we suspect, by many of their 'hard pressed' official brethren.

The case for the employment of private architects by official bodies has never been stated more cogently, and your analysis of concealed overheads is particularly apposite. It is not too much to hope that progressive authorities will consider their building programmes in relation to the point you make.

FREDERICK ADKINS [P INST RA, ARIBA],
The Institute of Registered Architects,
68 Gloucester-place, W1.

Training for Site Management

SIR,—Mr. Trench's letter ('The Builder' of May 19) disappoints. The least he could have done, after summarising my particular faults, was to tell your readers and me the reasons behind his findings. Personalities are no substitute for facts.

When reading Mr. Trench's and Mr. Vincent's lectures, I listed the following eight points:

1. Teamwork, not a superman, is required on site.
2. Teamwork is lacking on some sites.
3. Teamwork, like all phenomena, has produced both good and bad results; the bad result is the placing of personal ambition before the team.
4. There is no lack of the old-type general foreman. What evidence is there to show any such lack?
5. Where is the complexity of buildings today that was not apparent 20, 25 or even 50 years ago? Large buildings are not new problems in this country.
6. Most of top management are non-University men; yet we have had University graduates in the industry for many years without this arrogant attitude.
7. It doesn't flatter existing site managers to say that they are no good because they are non-U.
8. If site conditions were to be improved, there would then not be the desire among site administrative staff to get as soon as possible into head office.

The mistake I made in my original letter, I now see, was to reply to the lectures as a whole, whereas Mr. Trench appears only to be interested in one man, the superman, who—to quote his own words—is 'of tremendous importance to the firm. He is the man who will make or break the job; it is his drive that will bring the contract out at the right cost and at the time programmed....' Does Mr. Trench really know what he is talking about when he makes this statement? Site management is plural, not singular; it is a team of several professional, administrative and artisan-trained persons working jointly to execute a particular project.

Mr. Trench refers to the change of name proposed by the London Association of Builders' Foremen; this is fascinating, for they have fallen into the same hole as he—that of thinking that a change of name will make a rose smell sweeter. But foremen and clerks of works remain the same regardless of the name they have chosen to gather under. What happens when you have everyone on a site running about with the secondary name of 'manager'?

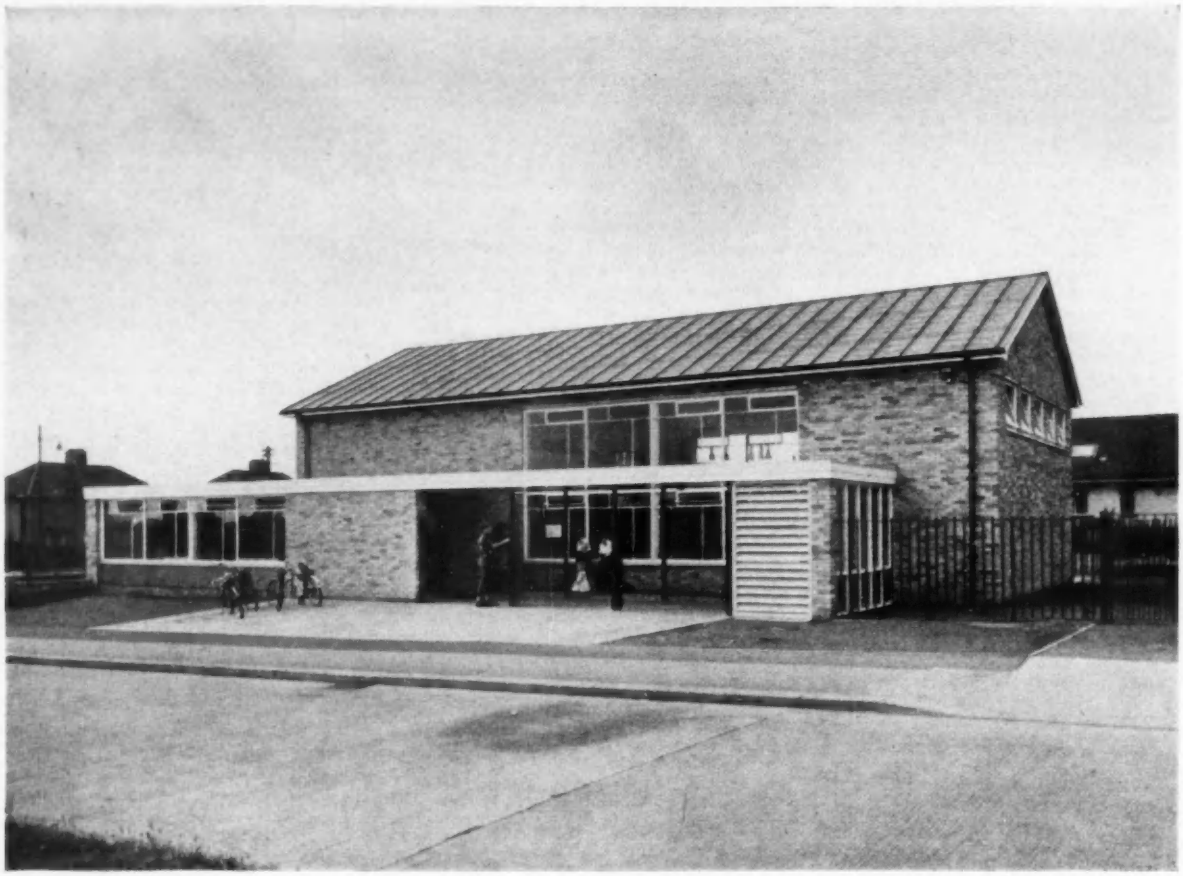
To conclude, if we are going to increase present speed and efficiency and lower costs, we must bring about more teamwork by means of further education; time is not on our side, it will not wait to see whether he or I are right or wrong. We must implement a broad scheme, not a pilot one. We are lagging behind other industries educationally and, as a result, technically.

W. E. TARBOTTON, AIQS,
94 Pinner View, Harrow, Middx.

'No wonder they call me "Maudlin" when I think of Christ Church Meadows'!

Branch Library, Bristol

ALBERT H. CLARKE, FRIBA, AMTPI, city architect
W. E. CHALKE & CO. LTD., general contractors



forecourt and covered way to the main entrance

THIS NEW BRANCH LIBRARY is in some ways a departure from previous libraries built in Bristol since the war. The aim was to present a cheerful and inviting interior to prospective users of the library. This has been accomplished by omitting fencing and providing a wide, fully-paved forecourt leading straight off the street pavement, and by carrying the front windows down to a low cill. Young children in prams can be left under the external covered way and parents can keep them under observation whilst inside selecting books.

The library was designed with special emphasis on the children's library accommodation. The ceiling over the children's section on the ground floor has been kept low, and over the service counter area is a gallery floor reached by an open timber stairway. This gallery has been provided for use by children for reference and preparation of homework.

Staff accommodation is provided at the rear of the building with separate entrance. Limited parking has been provided at the side of the building for cars and at the front for cycles.

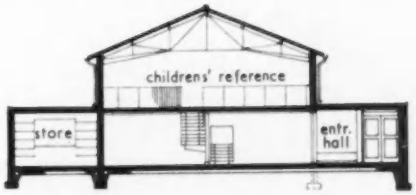
The main library has a steel frame with cavity walls of brickwork, the single storey portion being load bearing. The main shallow pitched roof is covered with copper and the flat roofs with built-up felt. All walls are plastered internally and decorated in bright colours. The floor coverings are linoleum tiles and Accotile. Heating is by an underfloor electrical system.

Bookshelves have been designed to stand off the floor on metal frames and are of natural hardwood. Special consideration has been paid to electric lighting to give a high degree of illumination internally and to attract the attention of the general public after dark.

sub-contractors & suppliers:

Bricks: W. W. Hall; *copper roofing:* Broderick Insulated Structures; *electrical installation:* Gladwin & Co. Ltd.; *underfloor heating:* D.I.V.A. system, installed by Gladwin & Co. Ltd.; *fencing & gates:* F. H. Dunn Ltd.; *steelwork:* Priest & Mullings Ltd.; *flooring:* Neuchatel Asphalte Co. Ltd.; *pavings:* 'Neolite'; *lighting fittings:* Forrest Modern, Merchant Adventurers of London Ltd., Falks; *library fittings:* Caisley & Son, Bristol; *windows:* Brunswick Metal Windows.

Above, general view of the library towards children's section, with children's reference library on the gallery



CROSS SECTION AND GROUND FLOOR PLAN

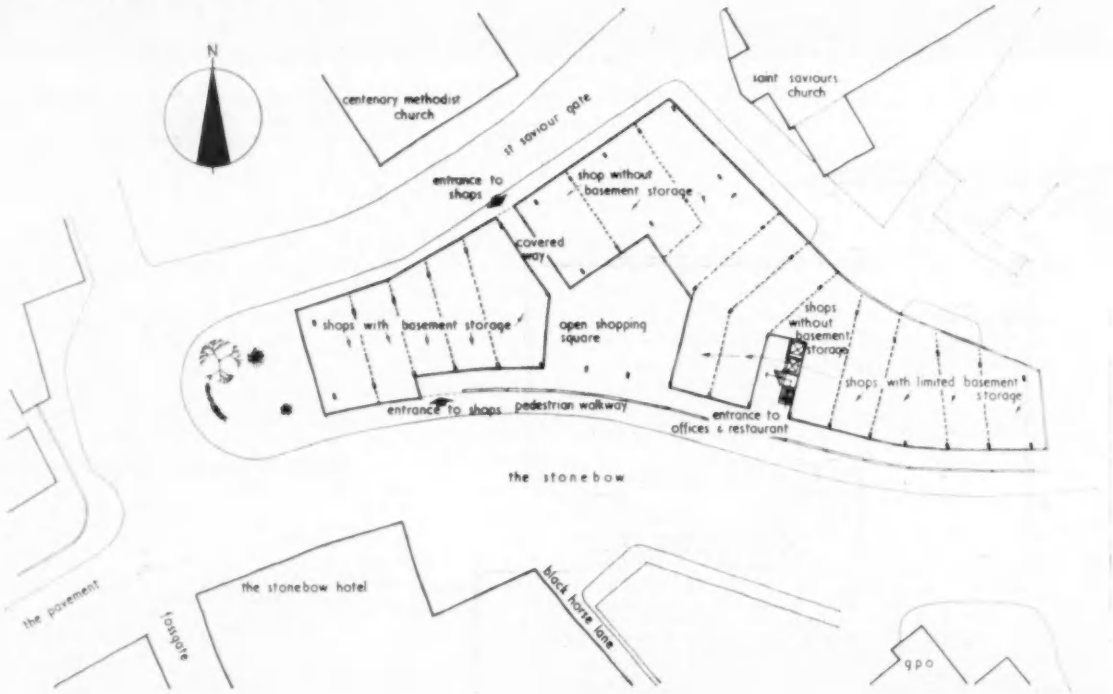
Scale : 1 in.=24 ft.

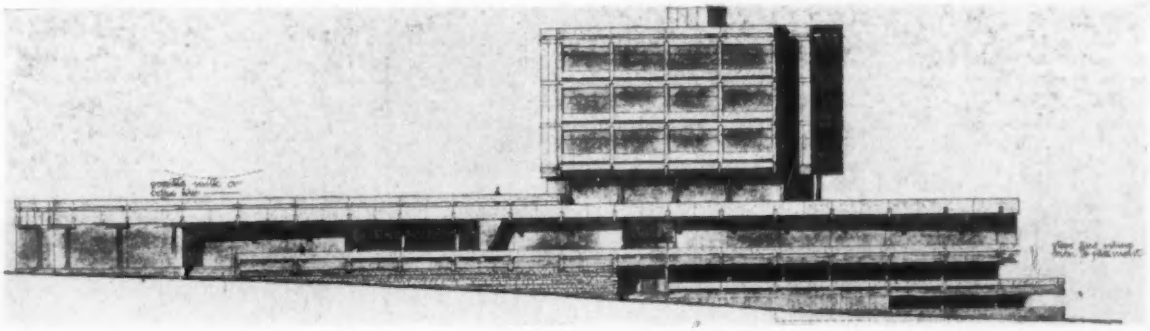
Town Square Project, York

WELLS, HICKMAN & PARTNERS, architects
RENOWN INVESTMENTS (HOLDINGS) LTD., developers

the Stonebow frontage from west

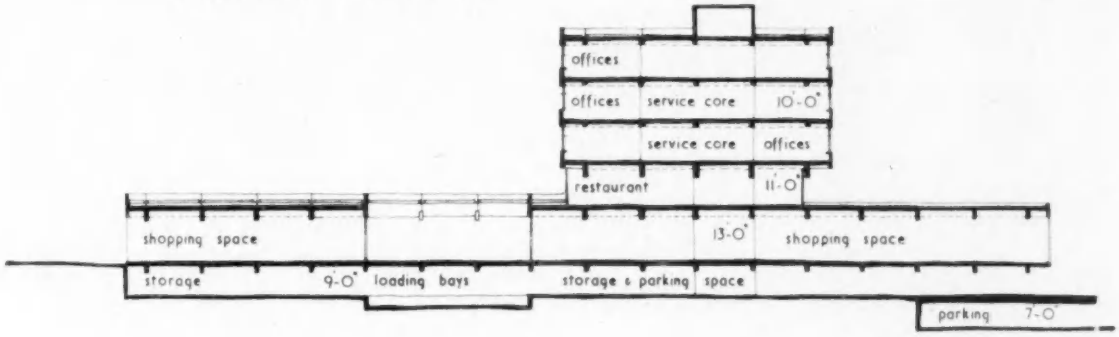
ground floor shops, scale: 1 in.=64 ft.





south elevation

long section, scale: 1 in.=64 ft.



open shopping square

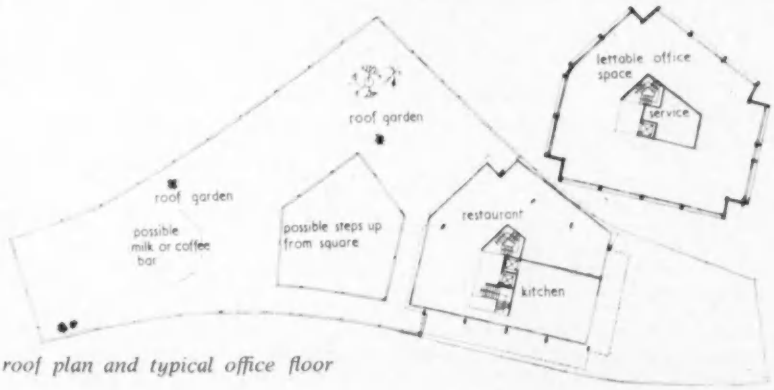
THIS DEVELOPMENT at St. Saviourgate and Stonebow, York, was the winning design, submitted by Renown Investments (Holdings) Ltd., in an open tender competition initiated by York City Council.

The scheme consists of shops (15,500 sq. ft.) and offices (39,500 sq. ft.). The main planning aims are: to keep the central space as a 'town square' in contrast to the narrow and crowded streets surrounding the site; to create convenient and pleasant shopping conditions for both customer and shopkeeper; and to relate the new building to the three churches fronting the square, all of which are of some architectural merit.

The site has a fall of fourteen feet across its diagonal length. This was utilised by raising the whole shopping floor to the highest pavement level and providing a pedestrian walkway and piazza, avoiding, as far as possible, pavement shopping.

The basement is used for storage, delivery, car parking and services.

The three floors of offices have separate access, both at ground level and from the basement. Building operations begin early in 1962.



roof plan and typical office floor

Sculpture at the Royal Academy

REVIEWED BY MARJORIE MORRISON

THIS HARDY ANNUAL, the Royal Academy Summer Exhibition, is with us again for the one hundred and ninety-third time: a solemn thought. Emphasising tradition, this year's charming poster shows the Prince of Wales and Sir Joshua Reynolds at the 1778 'opening,' surrounded by contemporary works of art and a fashionable crowd of people—the 'establishment' art hung very thickly indeed. Have things changed much after all the years of conformity? Current opinion insists that the citadel has been taken by infiltration and that the Academy is now much more representative of the imaginative experience of its time. This may be true of painting but it certainly is not borne out by the sculpture. Nevertheless what is on view is pleasant and easy to enjoy, but there is no single great work of art to be a focus or to set a standard.

'Neighbourly Encounter' (bronze), by Uli Nimptsch, ARA

Looking for something of architectural interest is unrewarding until we discover a bronze group commissioned by the LCC for Silwood Housing Estate. Here Uli Nimptsch has produced something that is perfect of its kind. There is nothing trite about the neighbourly encounter of the boy and girl on their different sides of the fence, even if boy is giving girl a flower. It is done in Nimptsch's very finished manner and the composition is interesting from all angles. Nearby is Sydney Harpley's most important exhibit 'Girl combing her Hair.' This sculptor progresses towards a simplicity and monumentality that is very impressive and at the same time retains the charm and sense of character of his earlier work. Although there has been little infiltration of the progressive and unfamiliar there are two works with a definitely non-figurative bias—the terrifying 'Baal,' a very false god by F. E. McWilliam, which suffers from an uncomfortably top-heavy look, and 'Agamemnon,' a rather un-significant form in iron, by Bryan Kneale.

It is always worth while seeing what Siegfried Charoux is up to, and we find a large figure, in cement, of a seated man ('Reading'), which does not quite come off because it embodies two different outlooks: his own and perhaps Zadkine's. The outlined void, indicating the book or newspaper that he is intent on, is quite out of place in the context of the realistically-treated figure and at the first glance you see literally nothing but this hole. His smaller work, 'Violinist,' is really much better.

Portraiture, usually the Academy's strong suit, is disappointing. Nothing really stands out among the quiet likenesses and presentation busts. Perhaps two celebrities, Sir Winston Churchill and Yehudi Menuhin, are the most striking. There are two versions of Sir Winston to choose from. The 'Chartwell Bust,' a bronze by David McFall whose work is always distinguished, is excellent. Dark green in colour, with head and underlip characteristically thrust forward, it embodies the general conception of Churchill as a character. The other version by Bryant Baker, in white marble, looking like a benevolent bishop with all character smoothed out of his face, is just how *not* to do Churchill. The President, Sir Charles Wheeler, gives us three versions of Menuhin which, shown together against a velvet background, achieve the effect of a composite portrait. Sir Charles is to be envied his challenging opportunity. The result is certainly honest, vigorous and interesting but the personality of the sitter surely calls for a more subtle and delicate treatment.

One feature of this year's exhibition which should go on record is the number, variety and charm of the birds and beasts interspersed with the humans. From carthorse foals to fighting cocks they all give pleasure and the materials used are a delight in themselves. Outstanding however are two specials. First 'Head of Cleo,' a small masterpiece (hidden in the Large South Room). This is the head of what must be the original shaggy dog of the stories, in a beautiful rusty terracotta used in a very shaggy way by Eva Castle. We could do with more of Mrs. Castle's very individual work in this exhibition. The other special is very different—a wood carving by Willi Soukop called 'Bestiary of the Backyard.' As the puzzling title suggests it is a far from ordinary beast with a totem-like quality and it is treated with primitive naivety. It is ugly, powerful and full of black magic.

'Head of Cleo' (terossa ferrata), by Eva Castle

Design Centre Products

COID Statement on Functional Efficiency

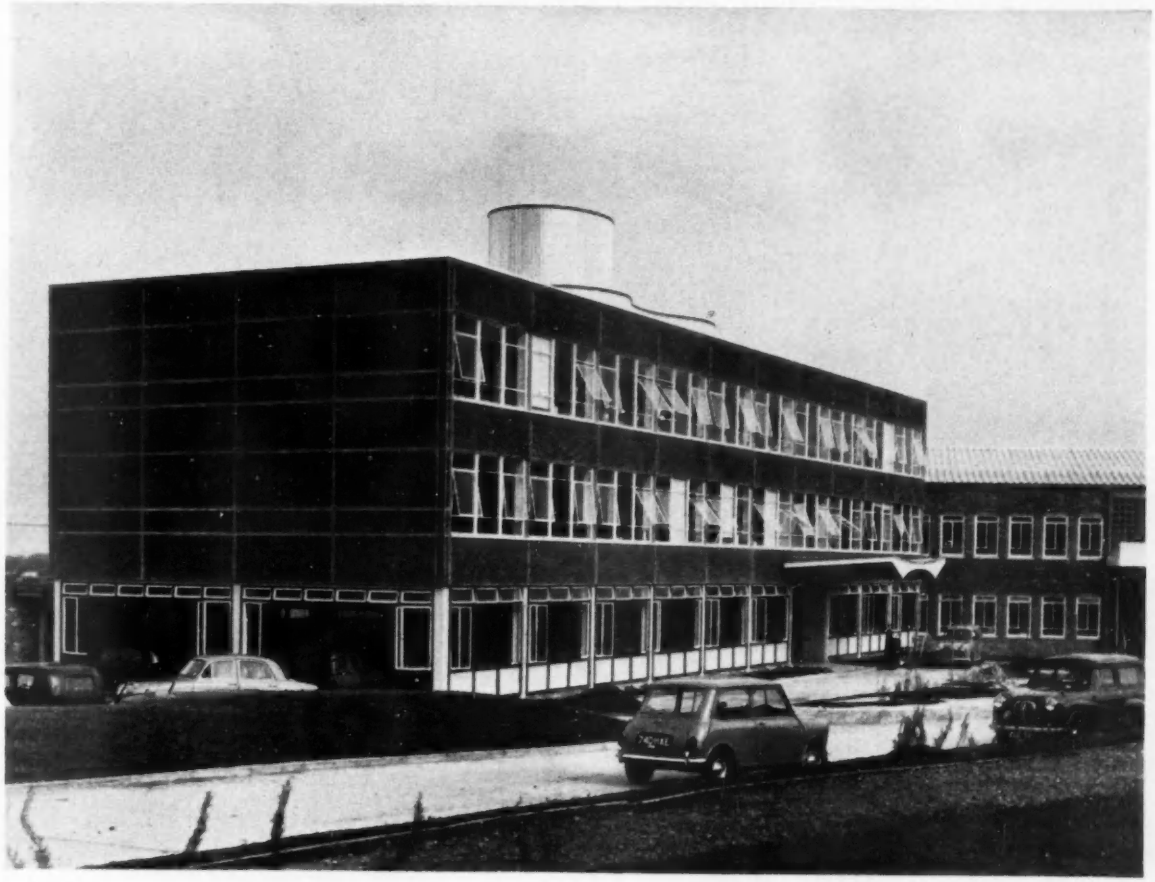
IN HIS SPEECH announcing the Design Centre Awards, HRH The Duke of Edinburgh drew attention to the problem of determining the efficiency of products included in Design Index, from which Design Centre exhibits are chosen.

It is therefore opportune (states the Council of Industrial Design) to reiterate what the Council has been doing since before the Centre opened regarding this important problem of verifying that products included in Design Index and shown in displays are functionally efficient. Where official organisations—such as the Gas Council, Coal Utilisation Council and British Electrical Appliances Board—exist, acceptance for the Index depends on a favourable report. For most other industries with goods in the Index a technical adviser—a research organisation, a panel or an individual—has been appointed to examine and approve products before their final acceptance. Where appropriate British Standards exist, such as those dealing with safety, all products must meet their requirements.

In the case of domestic appliances and equipment, some items are also given user tests at the Queen Elizabeth College for Household Sciences (University of London). In addition, the Council makes use of the findings of the two consumer organisations. In the course of the next few weeks cross-references will be added to the captions of those of the 10,000 items in Design Index on which testing has been undertaken.

Warehouse and Offices, Bristol

PETER FALCONER & PARTNERS, F/AARIBA, architects
JOHN TIMPSON, ARIBA, partner in charge
SIR ROBERT MCALPINE & SONS (SOUTH WALES) LTD., general contractors



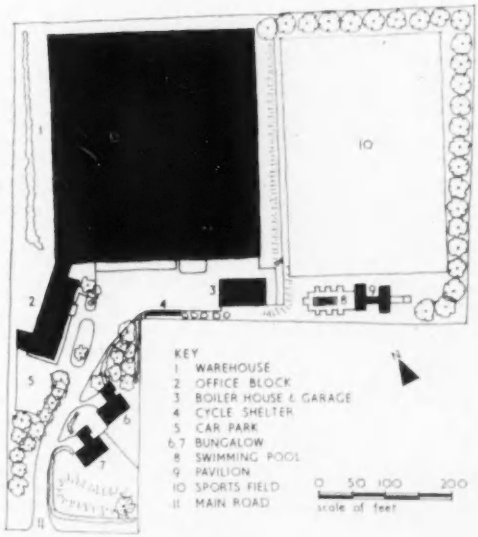
the office block, and warehouse beyond

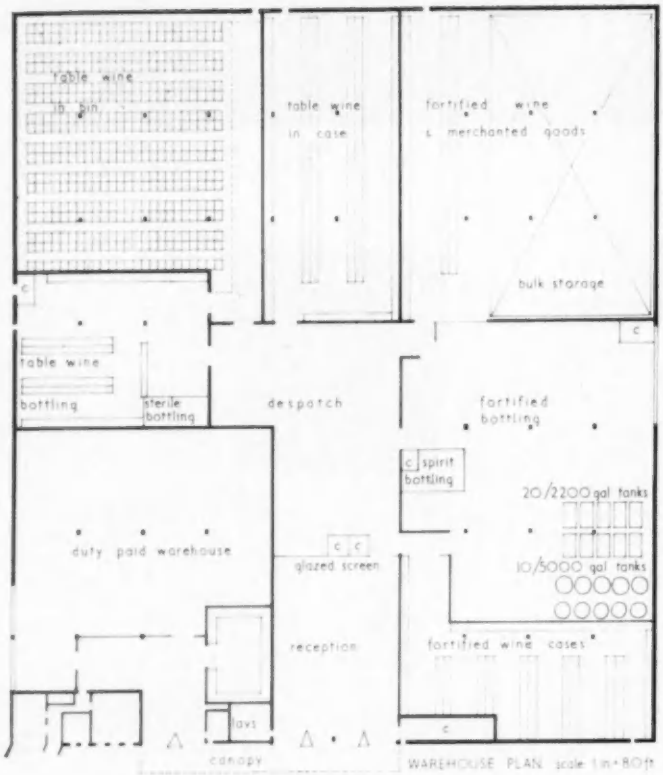
THIS WAREHOUSE at Whitchurch for John Harvey & Sons Ltd. provides space for storage and bottling processes previously carried out in a number of separate buildings. The design problems were to achieve stable temperatures usually associated with underground cellars, without the expense and handling difficulties involved in the traditional wine store, and to plan for concentrated storage of a large number of wines, each of which must be instantly available without disturbing the remainder of the stock and at the same time to provide for bulk storage of lines such as sherries.

The architects advised upon the most suitable handling methods, which in this case involved the use of fork-lift and 'skid-stac' trucks.

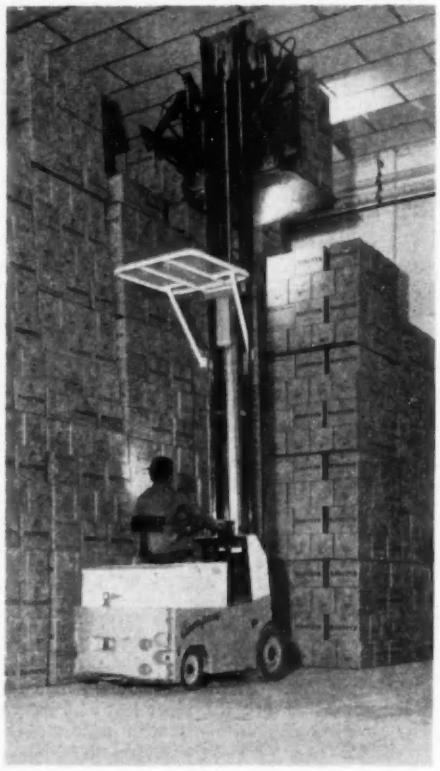
The detailed layout of the building evolved from the preliminary studies of handling methods. Reception area, cask storage, bottling areas, cased stores and the wine bin compartments are arranged radially around the order, assembly and despatch sections. Casks, cases or bottles are stacked 24 ft. high, in specially designed racks and bins, by fork-lift truck.

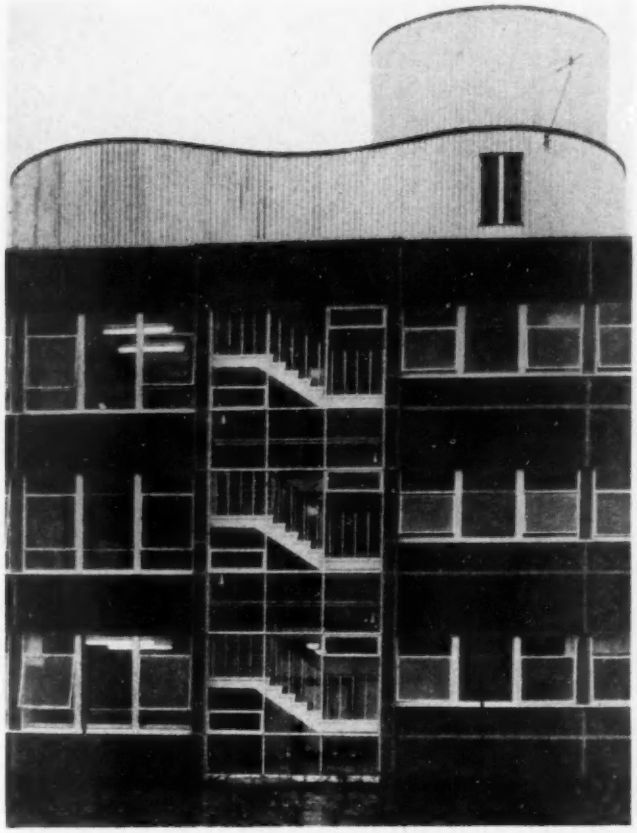
The building forms a simple shell to house these activities. Various compartments are formed with demountable partitions of cement rendered woodwool slabs in pre-cast reinforced concrete posts so that the various areas may be altered or extended. External walls are facing brickwork and inner leaf of 4 in. Thermalite blocks, the whole wall being stiffened with concrete cased steelwork. To





WAREHOUSE PLAN scale 1 in = 80 ft





Warehouse and Offices, Bristol

improve the insulation, the walls are lined with aluminium foil, 'Pyrolith' impregnated battens and an inner lining of woodwool slabs at lower level and expanded polystyrene sheeting above.

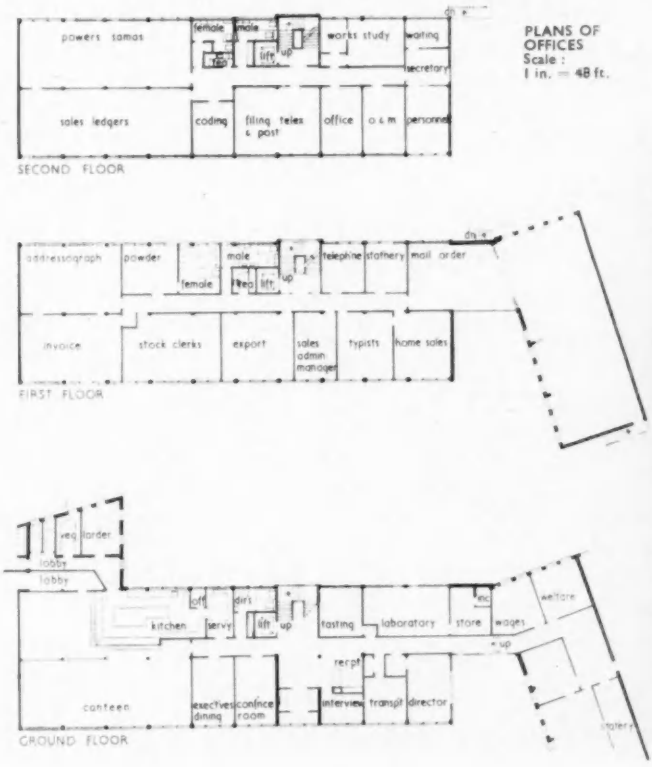
The roof is similarly insulated with double asbestos sheets sandwiching fibreglass and aluminium foil, and with a 'Marleycel' suspended ceiling. Heating is by 32 unit heaters arranged in the roof space, each with an output of 1,500 cu. ft. per minute.

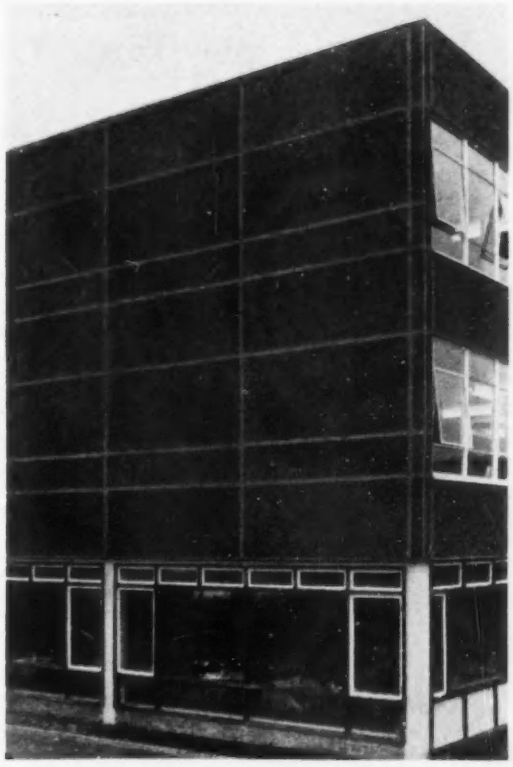
The offices have an r.c. framework and hollow tile floors. The exterior is clad with precast concrete facing slabs with exposed aggregate of dark green granite. Window mullions are designed to take partitions which are fitted between finished surfaces and are removable. Assistant architects: J. R. H. Swart, ARIBA (site architect), Miss G. M. Freeman, and M. R. Smith; heating consultants: Henry Goddard & Ptnrs; quantity surveyors: Venning, Hope & Ptnrs.; consulting engineers: Clarke, Nicholls & Marcel.

sub-contractors & suppliers:

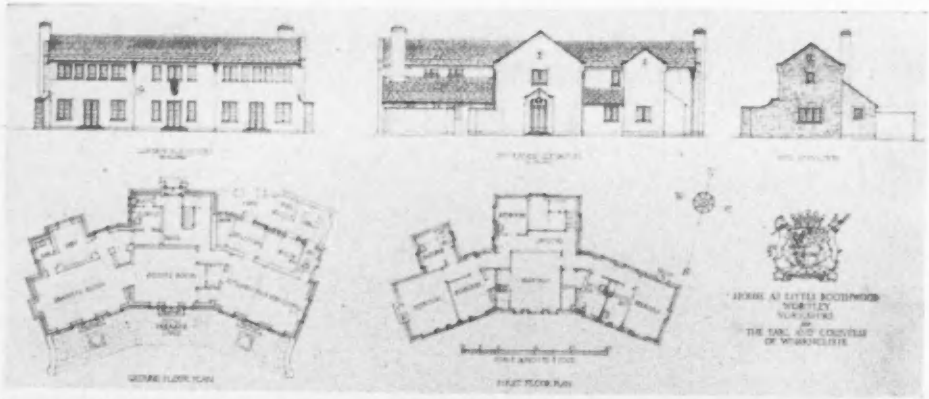
Marleycel & Marlith woodwool slabs: Marley Tile Co. Ltd., fixed by Baileys (Bristol) Ltd. and general contractor; *fork-lift trucks, etc.:* Conveyancer Fork Trucks Ltd., Industrial Trucks Ltd.; *production lines:* F. & C. Engineering Works Ltd.; *automatic equipment:* H. Erben Ltd., Mark-O-Print Ltd., Purdy Machinery Co., Albro-Fillers Ltd.

Left, office façade and aluminium-clad tank house. Below, exposed granite aggregate slabs on the offices. Facing page, bottling production lines, and fork-lift trucks in the warehouse which stack to a height of 24 ft.

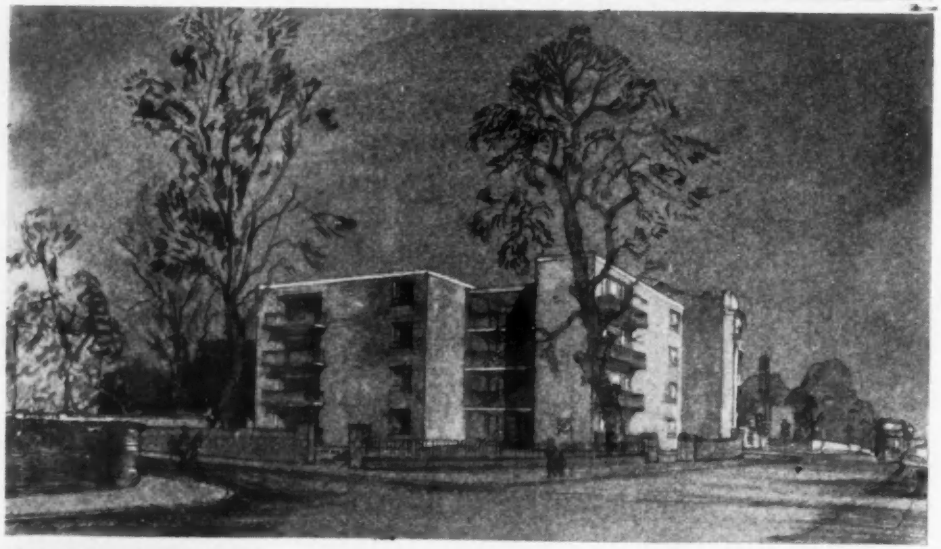




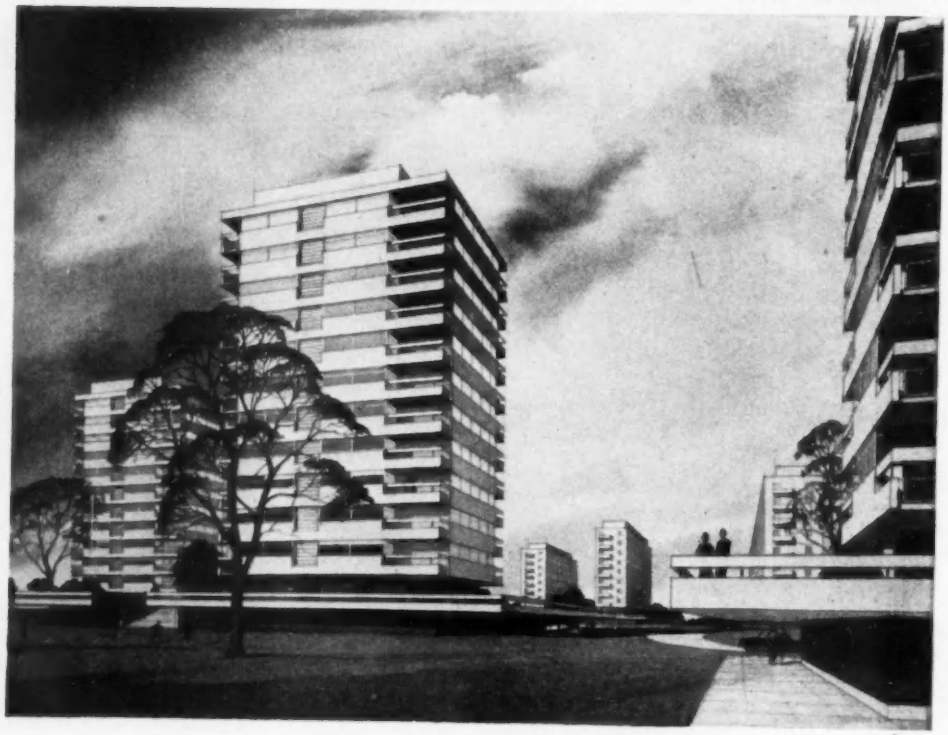
RA Exhibition 1961



House for the Earl and Countess of Wharncliffe. SIR HUBERT WORTHINGTON, RA. Drawn by Joan Worthington



Flats at Wandsworth Common, SW18, for Battersea Borough Council. DAWBER, FOX & ROBINSON. Drawn by A. D. Robinson



Proposed Development at Littlehampton. OLIVER LAW & PARTNERS. Drawn by John Stammers

Domestic Buildings

News of the Week

Planning Invitation Declined

SIR WILLIAM HOLFORD, PRIBA, has declined Bullingdon Rural Council's invitation to design a layout for the extension to Berinsfield, near Dorchester-on-Thames, just approved by the Ministry of Housing and Local Government. He is 'disappointed' with the council's insistence on a traditional layout on the lines of the present village designed by himself.

Sir William's decision was reported to the council at its annual meeting on May 24 when the Housing (Sites and Buildings) Committee stated that the Minister did not propose to raise any objection in principle to the extension of the development area. The plan is to add an extra 84 acres accommodating 500 houses to the 53 developed so far.

Sir William favoured a layout with houses fronting on to lawns and traffic separated from pedestrians. But the committee, after inspecting estates on similiar lines, decided that this sort of design would not be appropriate to Berinsfield. Speaking after the meeting, Mr. P. V. Farrell, vice-chairman, said: 'The committee still hopes to reach a compromise with Sir William.'

Sidgwick-avenue Buildings Approved

'BY A MAJORITY so great that a count was unnecessary,' states 'The Times' University Correspondent, the Regent House at Cambridge on May 27 approved the revised plans of Sir Hugh Casson and Mr. Conder for the Lady Mitchell Hall and the smaller hall on the Sidgwick-avenue site, which were challenged by Mr. Garth Moore and about 30 supporters. The revised scheme is shown in perspective at the Royal Academy Exhibition, and was reproduced in 'The Builder' of May 5.

Building Centre, Dublin

THE BUILDING CENTRE, DUBLIN, which has become a lively centre of ideas, has just tried a new one with success. This is to invite audiences of secondary school boys to the Centre to meet panels comprising architects, engineers, quantity surveyors, builders and others connected with building and able to give 'career guidance' to boys wishing to train for entry into the professions and building industry.

The first 'career guidance symposium' was held at the Centre on May 24 under the chairmanship of Mr. Niall Montgomery, BArch, MRIAI. About 100 boys from Dublin secondary schools attended. Panel members were Donal O'Dwyer, Principal, College of Technology, Professor Desmond Fitzgerald, Eoin O. Cionnaoith, mechanical and electrical engineer, J. H. Harbison, structural engineer, J. J. Jennings, building contractor, and T. C. McCarthy, whose subject was vocational psychology. Schools and colleges have been invited to send students of Leaving Certificate or equivalent standard to similar meetings to be arranged in Dublin. Later the idea may be extended to Cork and other centres. The Building Centre, Dublin, was accepted into the International Building Centre Organisation last month.

Theatre Technicians' Conference

LEADING FIGURES in the theatrical world are to meet in London from June 26 to 29 to discuss the architecture of the modern theatre. It is hoped that as many as 23 countries will be represented at the conference, organised by the Association of British Theatre Technicians, at the National Film Theatre. One of the aims of the meeting is to stimulate the interest of local authorities and architects in the construction of 'adaptable,' civic and other theatres with seating capacity up to 1,000. It is also intended to spotlight some of the problems arising from safety regulations which were drafted in the age of gaslighting and which still influence theatre building in many countries. Among the British representatives will be Mr. Eric Jordan, ARIBA, Mr. Norman Marshall, LRIBA, and Mr. Peter Moro, FRIBA. Dr. Richard Southern, the theatre expert, will also be present.

Golf and the IUA

DELEGATES who wish to relax following the IUA Congress may do so on the Royal Cinque Ports golf course at Deal where the RIBA Golfing Society will be holding its week-end meeting from Saturday to Monday, July 8-10. The Society will be glad to welcome up to a dozen Congress members and their wives, and hotel accommodation will be booked for them by J. Lawrence Barnard, ARIBA, to whom direct application should be made at Quadrant Arcade, Romford, Essex.

Advanced Architectural Studies

COURSES OFFERED during September and October at the Institute of Advanced Architectural Studies, Micklegate, York, include 'Design Opportunities in Timber,' from September 15 to 19; 'Waterside Buildings and Waterscape,' from September 23 to October 3; 'Colour in Architecture,' from October 6 to 10; 'Architectural Project Management,' from October 13 to 17; and 'Factory Design,' from October 20 to 24. Full particulars are available from the secretary of the Institute, Mr. J. P. West-Taylor, MA.

New Survey for London

A COMPLETE town planning survey of the County of London has just begun. Started at the same time as the national census, 25 LCC surveyors will, between them, be visiting more than a million houses, flats, shops, offices, factories and warehouses in the next 18 months. They are working from a mobile office and will make their way systematically across London from Hammersmith in the west to Woolwich in the east. A similar survey was made in 1947 and formed the background of the 1951 County of London Development Plan for the rebuilding of London up to 1972. The new survey will show what changes there have been since 1957 and an electronic computer is to be used in analysing these and relating them to the data on population, housing and employment which the census will reveal, so providing information which will be used in formulating the next Review of the Plan to carry it another step forward to 1980 and beyond.

BRIDGE ON THE AUTOSTRADA DEL SOLE.—*A lecture on 'The Bridges of the Autostrada del Sole,' of which the bridge shown above is an example, is to be given today (June 2), under the auspices of the Joint Committee on Structural Concrete, by Dr. Ing. Sergio de Amicis, the eminent Italian engineer, at the Royal Commonwealth Society, WC2, at 6 p.m. When complete, 'The Motorway of the Sun' will be 450 miles long, linking Milan and Naples, and crossing the Appenines by 35 major prestressed and reinforced concrete bridges and viaducts, 12 reinforced concrete arch bridges and 47 tunnels*

Temporary Mobile Classroom

DERBYSHIRE Education Committee has asked the county architect to design the prototype of a temporary mobile classroom, it was stated at the meeting of Derbyshire County Council recently. The intention is to erect such temporary buildings in any area of the county where housing developments proceed at a faster pace than the school building programme.

New Cathedral, Sheffield

AGREEMENT HAS been reached on changes in the shape of Sheffield's new cathedral, states Mr. George G. Pace, in the Sheffield Diocesan Review recently. Work is expected to start in a few months. The basic working drawings are now being produced and most of the necessary £250,000 has been raised. Mr. Pace says that the new plan has had to include the incorporation of ancient buildings such as the present chapel, the Shrewsbury Chapel, the St. Katherine's Chapel and the tower and spire. Nineteenth century portions such as the Burgesses Room, and newer portions which include the Chapter House, have also had to be included, as have also the foundations of the western portion of the nave and part of the choir, which had been placed in position before the outbreak of war in 1939. It is said that by the use of precast and pre-stressed concrete units it had been possible to reduce the roof supports to four, and this would enable a large congregation to be seated in a small area.

Radio Station for Chiltern Village

THE GOVERNMENT has agreed to the siting of a Post Office radio station on land to the west of the London-Fishguard road (A40) belonging to Kiln Farm in the Chiltern village of Stokenchurch, Buckinghamshire. This decision follows a public local inquiry arranged by the Minister of Housing and Local Government, which took place on January 17 and 18. The radio station will be built in beautiful countryside, but the Post Office has undertaken to use materials which will merge into the background, and to screen the site by tree planting. The station will consist of a building about 75 ft. square and 13 ft. high, and a radio tower 250 ft. high with a maximum diameter of 55 ft.

Shortage of Architects and Engineers

LACK OF ARCHITECTS, civil engineers and town planners is reported to be the reason for delay in implementing several new building schemes, including the new civic centre, at Wolverhampton. The borough engineer, Mr. H. Schofield, said on May 15 that work was still continuing on the inner ring-road, but no more civil contractors could be used to plan new corporation schemes. Such schemes would have to wait until the staff position improved.

Visit to Liner

ON JUNE 16, the Faculty of Architects and Surveyors is holding a dinner on board the s.s. 'Kenya' in London docks by kind permission of the British India Steam Navigation Co. Ltd. Members and guests will meet at the company's offices in 1 Aldgate, London, EC3, at 6 p.m., whence they will be conveyed by coach to the docks. Dinner will be served at 7.30 p.m. and an opportunity will be afforded of a look around the Liner. Application for tickets should be made to the Secretary, 68 Gloucester-place, London, W1.

Architects' Christian Union

A RECEPTION is to be given at the RIBA, 66 Portland-place, on June 15, from 7 to 8 p.m., by the Architects' Christian Union, when the speaker will be Mr. C. Oliver Styles. The reception will be preceded by a buffet at 6.30 p.m.

ARCUK Annual Report

THE CURRENT ANNUAL REPORT of the Architects Registration Council of the United Kingdom is now available from the secretariat, at 68 Portland-place, London, W1. Apart from brief descriptions of some interesting cases dealt with under 'Professional Conduct' the report is a singularly uninformative one.

IAAS Conference

A CONFERENCE of branch and chapter chairmen and secretaries of the Incorporated Association of Architects and Surveyors was held recently in London. General discussion took place on the formation of new branches and chapters and the revision of certain boundaries within the United Kingdom. It is hoped that this conference will become an annual event. Mr. P. Russell Walker, president, was in the chair.

Appointments and Retirements

MR. P. B. HASWELL, BARCH, ARIBA, deputy city architect at Leeds since 1946, is to retire on October 31. An advertisement for his successor appears elsewhere in this issue.

MR. ERIC LANGFORD LEWIS, ARIBA, principal assistant architect to Denbighshire County Council, has been promoted deputy county architect. He succeeds the late Mr. Gwilym Bellis, FRIBA.

MR. J. T. JONES, FRICS, LRIBA, architect, surveyor and water engineer, Neath rural district council, is to retire in October.

MR. G. C. QUILLIAM, BARCH, ARIBA, AMPTI, has been appointed Head of Portsmouth School of Architecture. He takes up the appointment on September 1, next.

MR. ALEC ADLINGTON, MICE, city engineer and surveyor at Lincoln since October, 1936, is to retire later this year.

MR. BRIAN H. MELLOR, senior planning assistant to Eastbourne County Borough Council, has been appointed deputy planning officer to Hastings County Borough Council.

MR. A. CHAPMAN, deputy engineer and surveyor, Atherstone RDC Warwickshire, has been appointed surveyor, Kidderminster RDC, Worcestershire, to succeed Mr. A. S. Northover, who is retiring.

MR. GEOFFREY READ, chief assistant in the borough engineer's department at Harrow, has been appointed deputy borough engineer at Doncaster.

Coming Events

MONDAY, JUNE 5

UTP EXHIBITIONS LTD.—Drawing Office Equipment and Materials Exhibition. Royal Horticultural Society's New Hall, Westminster, SW1. Daily: 10 a.m. to 6 p.m. (until June 8).

RIBA.—Library Group meeting: 'The Architecture of Charles Robert Cockerell,' by Mr. E. M. Dodd. 66 Portland-pl., W1. 6 p.m.

TOWN & COUNTRY PLANNING ASSOCIATION (PLANNING FORUM).—'The Need for a Land Finance Corporation,' by Mr. H. W. Wells. 28 King-st., WC2. 6.30 p.m.

WEDNESDAY, JUNE 7

ARCHITECTURAL ASSOCIATION. — Informal illustrated talk: 'Brazil and Brasilia,' by Mr. B. Westwood. 34-36 Bedford-sq., WC1. 6.15 p.m.

REINFORCED CONCRETE ASSOCIATION. — Annual dinner and dance. Dorchester Hotel, W1. 7.30 p.m.

THURSDAY, JUNE 8

INSTITUTE OF BUILDERS DISCUSSION CLUB (LIVERPOOL & DISTRICT CENTRE).—Meeting: 'Impressions of the US,' by Mr. D. B. Le Mare. Exchange Hotel, Liverpool. 7.30 p.m.

FRIDAY, JUNE 9

LONDON BUILDERS' FOREMEN'S ASSOCIATION. —'Stag Night.' Paviours Arms, Page-st., Westminster, SW1.

ESSEX CC.—Exhibition at Ingatestone Hall to mark the 400th anniversary of Queen Elizabeth the First's visit to Essex. Daily: 10 a.m. to 4.30 p.m. (until October 7).

COUNCIL FOR VISUAL EDUCATION.—Annual meeting. Followed by an address by the Minister of Housing and Local Government, Mr. Henry Brooke, on: 'The Importance of Good Design.' RSA, John Adam-st., WC2. 3 p.m.

INSTITUTION OF PUBLIC HEALTH ENGINEERS. —Summer meeting. Caxton Hall, Westminster, SW1. 4.30 p.m. (until June 10).

SATURDAY, JUNE 10

INSTITUTE OF BUILDERS' DISCUSSION CLUB (CHELMSFORD & DISTRICT CENTRE).—Joint visit with Maidstone & District Centre to Dartford Tunnel. 10.30 a.m. (at Tunnel).

NORTH WEST EDUCATIONAL ASSOCIATION FOR THE BUILDING INDUSTRY.—Meeting: 'Communications in the Building Industry,' by Mr. Ian M. Leslie, Editor of *The Builder*. Central College of Education, Carlett Park, Eastham, Wirral. 10.30 a.m.

Professional Announcement

The practice of MR. FREDERICK J. BRAND, MISTRUCT.E, chartered structural engineer, of Chalmers House, 43 Russell-square, London, WC1, has from June 1 been restyled as MESSRS. FREDERICK J. BRAND AND PARTNERS, consulting structural and civil engineers. The partners include MR. F. J. BRAND, MR. W. F. G. CROZIER, MSC, MICE, and MR. D. J. GLOYENS, AMISTRUCT.E. MR. A. E. IRONMONGER, AMISTRUCT.E, by mutual arrangement, left the practice on May 31.

A Hundred Years Ago

From The Builder of June 1, 1861

TELEGRAPHIC.—The stretching of telegraphic wires across the tops of houses and streets is exciting some stir in provincial towns. The *Birmingham Gazette* says on this subject—'We cannot admit the right of any company (the United Kingdom Electric Telegraph Company is more particularly referred to) to use the streets of Birmingham at its pleasure, without at least applying for permission to do so. Nor will the evil stop here. The Magnetic Telegraph Company are not unlikely to ask permission to bring their wires through the town; and they propose to follow the example of their competitor.'

More Everyday Things

BY ARTHUR W. KENYON, CBE, FRIBA

44. Drawers

IF YOU EVER WATCH people examining furniture you will find the first thing everyone does instinctively is to open a drawer. Take a look in a furnished house at any exhibition and you will see people pulling open drawers in every fitting. It would be interesting to analyse the reasons that prompt this: an idle curiosity to see if there is anything in the drawer; the suspicion that it may be false and does not open at all, bred of long browsing in antique shops; the mere satisfaction of opening it and closing it again; and of course the practical reason of seeing how easily it opens and shuts and how well the drawer is made. There is an element of all these things in our zest for drawer opening. A drawer that opens smoothly and fits so snugly that when it is closed it almost forces another out, always gives me infinite pleasure and satisfaction, for I know it to be the work of a devoted craftsman.

There are so many ways of making a drawer that there is usually little point in attempting to detail it for the craftsman, as he will have his own pet way of doing it Generally, however, the fronts and sides are dovetailed together, but the backs are often found to be less carefully done and sometimes there is a halving joint, rather like toothing. In small drawers the bottom is usually flush with the front and side, but in larger drawers it is housed or screwed into the back, front and sides, and consequently it is slightly raised, leaving the bottom edge of the sides free to act as runners. Sometimes there is an ovolo moulding between the bottom and sides inside the drawer: this is usually to be found in Victorian work, but there are many variations of this.

We often hear it said by kitchen experts that you cannot provide too many cupboards and drawers, but I sometimes think you can. Drawers are convenient dumping places for unwanted bits of household junk. There is a feeling of virtuous satisfaction in having put things away, when all one has really done is to stuff them at the back of a drawer where with any luck they may lie forgotten for years to come.

I remember once visiting a laboratory where there seemed to be an abundance of small drawers, and when I asked why so many were required, all the numerous items of small equipment in constant use in a laboratory were painstakingly explained to me. One set of drawers, for instance, was used for corks, graded in different sizes. So I opened one of the drawers and found it contained a duster and an orange; then I opened the next one, and found an agglomeration of corks of every conceivable shape and size. I assumed that 'grading' had referred to the separation of corks from oranges.

Well-made drawers, well-kept and properly used, can be a great joy, offering you just the thing you want at the moment you want it in the place you expect to find it. When I see a beautifully made piece of furniture with drawers that run like oiled magic, full of dusty junk, it seems to me a form of sacrilege and I wonder whether the craftsman who made the piece would feel as hurt as I do on his behalf.

Drawers, like everything else, repay kind treatment. Not only do they like to be tidied out occasionally, but they like to have their sides and runners waxed at the same time. If you use ordinary floor wax liberally in this way now and then, you will find your efforts well rewarded; in fact, your drawer will run so smoothly that one gentle pull will leave it dangling in your hand with the contents on the floor, so that the tidying out becomes automatic.

The Thatcher's Craft

First Complete Authoritative Work

THE THATCHER'S CRAFT. (London: Rural Industries Bureau.) Price 42s. net.

THOSE TRADITIONAL and attractive ornaments of the English landscape, described by Henry James as 'unmitigated England,' are the subject of this first complete and authoritative work. It deals with the history of thatch and contains carefully illustrated, stage by stage descriptions of methods of construction, sub-divided into sections on long straw, combed wheat and Norfolk reed. There are chapters on materials, tools and thatching costs. The book fills an important gap in the available information on country crafts, this in particular being one of the oldest of all building crafts practised in the British Isles.

It is interesting to note that even today, roofed as we are by concrete, asbestos and corrugated iron, the demand for thatching is such that over 800 full-time thatchers are kept occupied. This comparatively large force of traditional craftsmen have learnt the skills and intricacies of their work from their fathers, the need for a textbook and a 'standard method of measurement and cost' being farthest from their minds. In the main this volume will not alter their independence and probable contempt for such documents, but it will undoubtedly be of great value to architects, quantity surveyors, builders and others to whom the craft is a mystery.

All will be pleased to know that text is minimised, the excellent half-tones filling the role of guide and teacher. Since it is most important to provide a properly constructed framework for the thatch, a whole chapter, illustrated this time by drawings, has been contributed by Stanley Bragg and Associates, chartered architects, of Chelmsford, Essex. The book concludes with a word about fire protection and a useful glossary of thatcher's terms. Splendid photographs of the best examples of thatched cottages give added interest. A.D.

**** Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

South-East Essex Artists

'Open' Exhibition at Southend

ONE USUALLY associates the popular southern coastal resorts as just places of mass entertainment. One would expect to find such resorts as these, and their Councils, to be more interested in cultivating the seafront and devising new ideas of entertainment.

Apparently not, for Southend-on-Sea anyway has for the past few years encouraged art and artists by holding a number of exhibitions, and on May 27 yet another was opened—the Fifth Southend 'Open' Exhibition, containing selected works by amateur and professional artists from South-East Essex.

Aware of the wide interest aroused and of the encouragement given to local artists by this exhibition during its first four years, the libraries, art gallery and museum committee decided upon a fresh approach by inviting a nationally-known critic, Mr. Terence Mullaly of the 'Daily Telegraph,' to make the selection. The effect of this was to make Mr. Mullaly's task even greater than was anticipated, for 262 artists submitted 585 works—compared with last year, 125 extra entries from an additional 58 would-be exhibitors. From this large entry, 223 works were selected for exhibition, representing the work of 144 artists. The selection, inevitably including debatable material, ranges widely in subject, technique and accomplishment, but gives a fair cross-section of the creative and recreative pastimes in South-East Essex. The exhibition remains open until July 2, and is being held at the Beecroft Art Gallery.

American Architectural Honours

Double Award for New York Architect

FROM A NEW YORK CORRESPONDENT

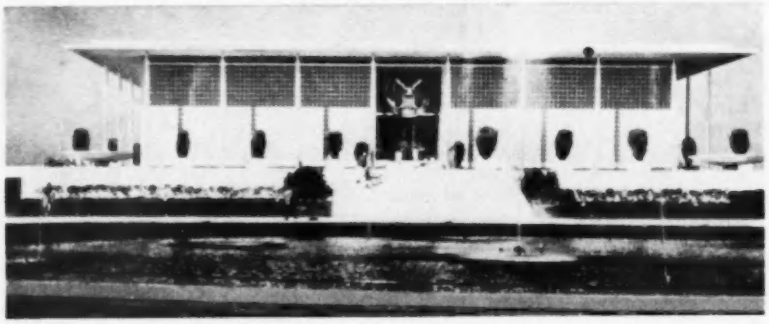
A JURY of leading American architects has selected seven recently completed buildings for the annual Honour Awards of the American Institute of Architects. These buildings, the jury said, 'went far beyond mere competence and achieved true significance.'

Every year the American Institute of Architects gives awards to recently completed buildings 'which demonstrate true leadership in architectural design.' Chairman of the all-architect jury was Morris Ketchum, Jr., of New York. Serving with him were Fred Bassetti of Seattle; Richard D. Butterfield, West Hartford, Connecticut; Arthur Q. Davis of New Orleans, and William L. Pereira, of Los Angeles.

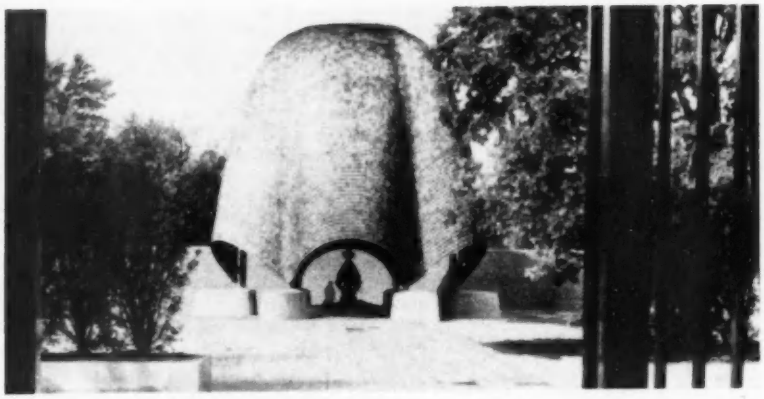
The 1961 AIA Honour Award winners are as follows: United States Embassy in New Delhi, India, by Edward D. Stone, of New York; the Shrine in New Harmony, Indiana, and the Nuclear Reactor in Rehovot, Israel, both by Philip Johnson of New York; Summer House in Northville, Mich., by Birkerts and Straub of Birmingham, Michigan; the Reynolds Metals Regional Sales Office Building in Detroit by Minoru Yamasaki of Birmingham, Michigan; Fernando Rivera Elementary School in Daly City, California, by Mario J. Ciampi with Paul Reiter as Associated Architect, of San Francisco; and the Pepsi-Cola World Headquarters in New York by Skidmore, Owings and Merrill, of New York.

It is remarkable that Philip Johnson was awarded two prizes. This is the first double award since 1955, when the firm of Eero Saarinen and Associates participated in the design of two winning entries. Mr. Johnson's winning designs, though they are widely different in type, have in common a bold line and a striking aspect. His Indiana shrine has as its dominant feature a masonry canopy of unusual shape. A beehive-like dome rests on six concrete piers. The sides of the canopy have been constructed in such a way that the inside of the shrine is open to view from ground level at all points of the compass. Mr. Johnson's nuclear reactor building is a massive concrete structure with forceful lines.

In addition to the Honour Awards, the Jury of the American Institute of Architects selected eleven Awards of Merit. They include a variety of projects: The Ivory Tower Restaurant in Santa Monica, California, architects Richard Dorman & Associates, of Beverley Hills, Cal.; the new Hilton Hotel in Denver, Colorado, designed by I. M. Pei & Associates, New York; the Marina Bay Display Pavilion in San Rafael, Calif., architects Bay Group Associates, San Francisco; the Office and Warehouse for the Coppertone Corporation in Miami, Florida, designed by Weed-Johnson-Associates in Miami; a Residence for Dr. Henry G. Simon in New Orleans, Louisiana, architect Charles R. Colbert,

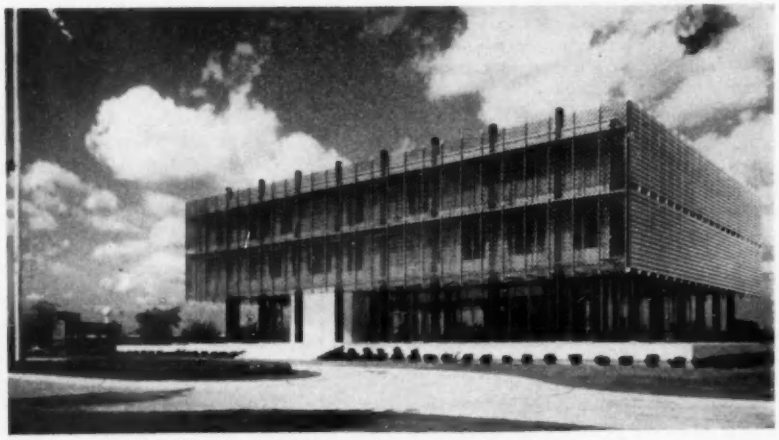


USA Embassy, New Delhi. Edward D. Stone, architect



Religious Shrine, New Harmony, Indiana. Philip Johnson, architect

Reynolds Metals Regional Sales office, Detroit. Minoru Yamasaki, architect



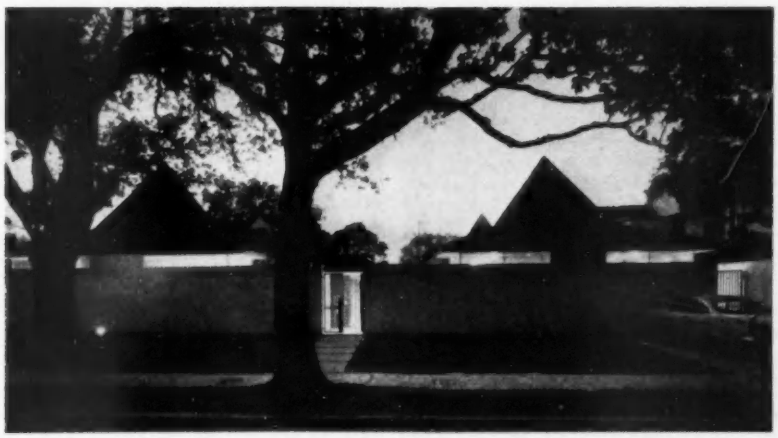
Riverdale, New York; the Chapel of the Moline Public Hospital in Moline, Illinois, designed by Henry Hill in San Francisco; an Office Building for a Development Firm, architects Killingsworth Brady Smith and Associates in Long Beach, Calif.; the Unitarian Church in Concord, New Hampshire, architects Hugh Stubbins and Associates, Cambridge, Massachusetts; the Crown Zellerbach Building in San Francisco, designed by Hertzka & Knowles, and Skidmore, Owings & Merrill, San Francisco; the Lincoln Commons Building of Lake Erie College in Painesville, Ohio, designed by Victor Christ-Janes and Associates, New Canaan, Connect.; and the Willow Creek Apartments in Palo Alto, Calif., architects John Carl Warnecke and Associates, San Francisco.

Almost every building type, such as residences, apartments, restaurants, recreation buildings, churches, schools, colleges, museums, stores and shopping centres, office buildings, industrial buildings, governmental buildings and large urban renewal housing projects, was included in the 270 submissions from every region of the United States including Hawaii. The Jury 'was well pleased with the overall quality of the entries.'

The Jury's report made the following remark: 'Today's architecture, after a hundred years of progress, is still vigorously explaining new materials, new structural methods and aesthetic solutions in every field of building. The Jury hopes and believes that the projects selected for awards exemplify some of the best results of this imaginative progress towards architectural maturity.'

The American Institute of Architects Awards Programme was established in 1949. Its aim is to encourage the appreciation of excellence in architecture and to afford recognition of exceptional merit in recently completed building. Any registered architect practising professionally in the United States is eligible to submit work. The buildings entered in the contest may be located anywhere either in the United States or abroad. However, they must have been completed within the past five years.

Residence, New Orleans, Louisiana. Charles R. Colbert, architect



The RIBA and the Regions

First General Meeting Outside London

FROM OUR SPECIAL CORRESPONDENT

ON SATURDAY LAST, May 27, took place the first RIBA general meeting ever to be held outside London. As one converged along with more than 200 other northern architects on Leeds, it was recalled that way back in the 30s George Orwell in his 'Road to Wigan Pier' had pointed out that towns passed through, such as Manchester, Rochdale and Halifax, were ugly only because they happened to be built before smoke abatement methods were known. But this and other such 'Wigan Pier' (which actually exists) recollections were dispelled in the sumptuous Queen's Hotel ballroom chosen for the meeting.

This meeting, requested by the Allied Societies Conference earlier in the year, gave North of England members the opportunity to meet the principal officers of the RIBA, and senior members of the staff. SIR WILLIAM HOLFORD, president, in his customary urbane manner, opened the proceedings by outlining the activities of the Institute. Membership, management technique and the new certificate book were dealt with and he explained, and deplored, that the junior members' (not students') committee had failed through lack of support. He emphasised that a prime function of Institute officers, as also of heads of Allied Societies, was to seek out talent amongst juniors with a view to membership of the Council committees. Two topics, very much in the air at the moment, the 2-tier system and the package deal, were then introduced by F. Chippindale and J. Lewis Womersley respectively, commented on by the platform party, and then thrown open to discussion.

'Back-door' Qualifications 'Too Easy'?

MR. CHIPPINDALE referred to the low standing of the profession in public estimation, implying that this was a reason for the two subjects at 'A' level coming into force in October for entry to a recognised School; this was a recommendation of the Oxford Conference. Also to be accepted should be the recommendation for 500 of a second category. There would also be a place, he thought, for the Technical College 'O' level man in the small and provincial office who had no ambition to be a designer. Mr. Chippindale gave the impression that he thought 'back door' qualification (presumably office and evening study) was easier than it should be. It is recalled, however, that some of the ablest practitioners have qualified in this way.

A Spirited Discussion

A most spirited discussion followed, the first contributor, D. BOTTOMLEY of the West Riding being quite incensed. He convincingly avowed that a 2-tier category would not make for better designers. In this he was supported by J. C. SPOONER of Newcastle and N. H. FOWLER. A voice said the 2-tier refrain was an out-of-date gramophone record we'd heard far too much of, and that a system of joint training would be preferable. Apropos of this topic, the most thought-provoking contribution was made by DR. R. BRADBURY of Liverpool. He reminded members that the kind of door did not matter; it was the quality passing through which counted most. On balance he thought a five-year course of study best, but on the other hand we should have respect for other methods of qualification. Of the 2-tier proposal he posed the question as to whether there was a place in the profession for other than architects and if so how such people were to be educated and integrated. From the platform D. E. E. GIBSON (Hon. Secretary) spoke of organisations responsible for the maintenance of millions of pounds worth of existing buildings; such work has hitherto been done by those called clerks of works, surveyors, etc. This body existed now, was not properly looked after, and should not be lost to the profession as were the quantity surveyors. He therefore thought there was a place for the second tier.

Apparently at Newcastle, training methods are being given serious consideration. As from October the two subjects at 'A' level become a prerequisite to entry and all will start on a 3-year course leading to a BA. D. WISE of Newcastle, who made this statement, went on to say that after this period if progress was good, continuation could lead to the BArch. Those who had not progressed so well could filter into other professions, as could others who wish to do so of their own volition. Advantages of this arrangement are self-evident, and a point made by Mr. Wise was that thus could the consultant problem, which many would agree sorely tries the profession, be solved. This experimental 3-year period of basic disciplining at Newcastle will be watched with great interest.

A CUMBERLAND DELEGATE thought the

profession already too large and that due to a too rapid expansion it had become impossible to get the standard required. The answer to this, he thought, was to have a smaller profession (presumably of designers) with an enlisted cadre of technicians—who need not be part of the profession—to carry out the work; whether this was to be a short- or long-term policy was not made clear. DENIS HARPER, of Manchester, thought it impossible to train technicians without the collaboration of the practitioner and queried the wisdom of a 3-year training period which he thought too limited. [Manchester's own proposals for a 4-year course are outlined on page 1034. ED.]

A Non-committal Homily

There followed a wisely non-committal homily on architectural education by the Board's chairman, E. D. MILLS, consisting largely of the Oxford conference's findings which, for better or worse, seem to have been acted upon. Apology was made for the unfortunate terms 2-Tier or Second Category which apparently have engendered some hostility; when it was avowed, however, that a Second Tier did not imply a lower category the raising of eyebrows could almost be heard! A cogent observation was that three types of offices existed in the country; in these worked 10,000 unqualified assistants, and as only 5,000 of these were students the remaining 5,000 were a hard core of 'usefuls' who must be accepted, said Mr. Mills, and integrated as part of the team. He concluded by declaring to the meeting he was an office and evening study product and came in through Mr. Chippindale's 'back door.'

In passing it may be said that experience of the inadequacy of 'O' level standards begets unease as to whether the required two passes at 'A' level will be a satisfactory yardstick for entry to the profession. It is believed that with two such science subjects a student can be virtually academically illiterate and that with two academic subjects he can scientifically be absymally ignorant. The Education Committee's work is by no means done and the vexed question of architectural education, one sensed, is still very much unsolved.

Package Deals on the Counter

As a consequence of so much interest in the foregoing, the Package Deal discussion had, as Sir William said, 'to be squeezed a little smaller.' J. LEWIS WOMERSLEY, of Sheffield, launched this most humorously by reading an incredible letter received by him which heavily emphasied what the code-conscious architect was up against in this respect. Visitors were left in no doubt about the package dealers being well and truly on the march and how very difficult it was going to be for the RIBA to cope with the problem; despite the drawbacks Mr. Womersley thought the Package Deal had something, and in addition, of course, he pointed out that private architects could directly benefit. The essence of the arrangement, it was stated, was to thoroughly plan the programme and keep to it; the package dealer was essentially a contract organiser and therefore a pre-contract organiser too. Mr. Womersley thought belittlement no way to defeat the package deal; it could only be done by meeting the challenge with something better; practicality was hazarded as an answer. The assumption that the designer was head of the team should perhaps be shed, the engineer having already become a candidate; probably the builder's turn to participate similarly had now come too. Mr. Womersley's trenchant address left members momentarily out of voice.

The Position of the Sub-contractor

Recovery quickly followed A. G. SHEPPARD FIDLER'S observations which carried weight as coming from the chairman of the Practice Committee. He acknowledged the excellence of the package dealer's programming but the reverse could be true of the sub-contracting arrangements. He hoped the client would insist on the employment of an architect in association with the package dealer. A West Riding member MR. LUNN, speaking from experience, provided figures which indicated that such schemes had been found to be up to 30 per cent more costly than the customary methods of building. THE PRESIDENT said this was the kind of information that would be helpful to the Council's deliberations.

Some speakers stressed the power of the cost and time factor shots in the package dealer's locker; others emphasised that architects were being increasingly employed by him, not working to RIBA scales of remuneration, and could be and were being dispensed with overnight. A fervent plea for the Institute to do something was made by a MEMBER, evidently a private practitioner, who avowed that the loss of such a commission was more serious for the private architect than the local government architect whose job was not in jeopardy. The most spontaneous applause came following a forthright declaration that architects working for package dealers were renegades and should be deprived of Institute membership. So the cut and thrust continued—illuminated by a sound suggestion from MR. GIBSON that a known contractor could make approved rates for one job applicable to a series of projects—until finally there came the brief summing up by THE PRESIDENT.

Summing Up

This dealt with anomalies in the package deal, the unsatisfactoriness of the architect being employed by a firm and not being able to affect policy and a promised investigation as to whether the architect can become a director. As Mr. Womersley had said, 'We were up against it,' and as Mr. Gibson advised, 'We should investigate.' This we were just beginning to do and Sir William promised a look at the code of professional practice in the light of what is happening. Then occurred a tea break during which written questions were handed in and subsequently dealt with by the platform party. From these it emerged that concern was felt at the few architects to be found in planning offices and at the length of time it takes to qualify as a town planner. The low status of the architect in planning was deplored as was the unsatisfactoriness of his position in this respect. It was asked whether the Town Planning Instiute could not prevail upon the Chancellor of the Exchequer to provide funds for the redevelopment of central areas so as to prevent architects falling into the hands of speculative developers.

Public relations and legislation were discussed at length, and with clarity (microphone-aided) by W. G. HOWELL and Institute officers—GORDON RICKETTS and MALCOLM MACEWEN. It was thought unsatisfactory that it should be permissible to submit matter to the technical Press but not to newspapers; this was being explored. As to the tightening-up of submission of plans to a local authority—involving a protection of function as well as of title—this was a difficult problem. Realisation is only possible by a Bill through the House which could prove the measure to be in the interests of the general public; this would seem unlikely at present.

A Welcome Unanimity

A pronounced impression which many would take away from the Conference was the unanimity which exists among members. It seems hard now to recall that there were once differences between local government and private architects. It was made clear that all were working harmoniously and energetically with an awareness of the problems, and for the common good.

Following the business part of the meeting came PERCY JOHNSON-MARSHALL'S celebrated 'Stick 'em up, you're going for a ride' lecture; and what a ride it was. His three lanterns took us across the United States from coast to coast—and back again. Along with the raciness of the entertainment two thoughts remain: the first is the apparent chaos, in the planning sense, of that Continent and the fact that every day the confusion is seemingly being made more confounded. Second, it came as a surprise to learn that Lewis Mumford of 'Culture of Cities' and 'City Development' fame—and who is to be honoured by the RIBA on June 27 lives not an urban life but as an 'escapist' in an isolated New England-style house in a remote part of Massachusetts! Evidently not only in old England but also abroad is the adage that an ounce of practice is worth a pound of precept still to be learned by the planning pundits!

So successful was this first provincial general meeting there seems little doubt, now that history has been made, that it will be repeated.

BRS Open Days

FOLLOWING the formal opening of the new materials laboratory at the Building Research Station there will be four open days to allow interested persons to witness displays of current research illustrating the Station's programme. All aspects of building research, other than structural engineering, will be on show. Applications for visits should be made to the Director, Building Research Station, Bucknalls-lane, Garston, Watford, Herts. Open days will be held from July 10 to 13 from 10 a.m. to 4.30 p.m.

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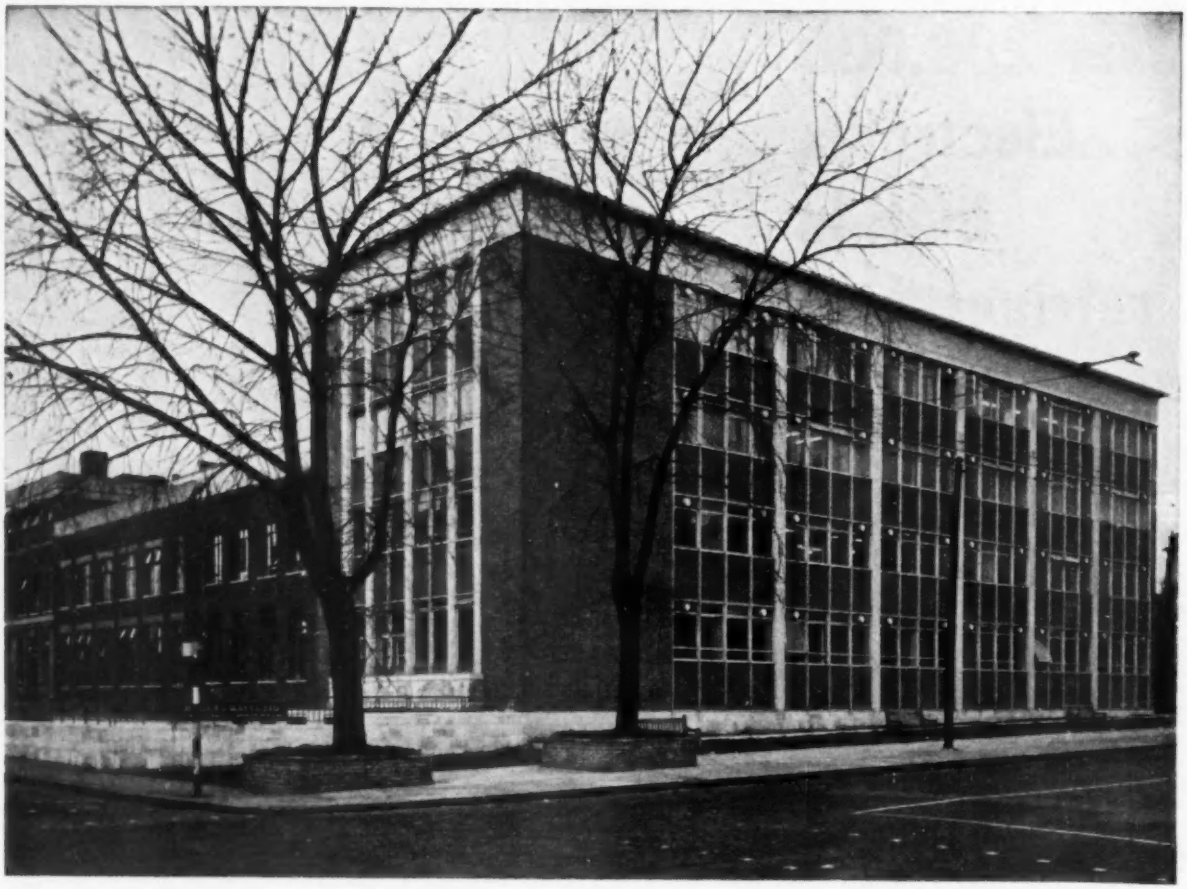

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Control Over Contract Expenditure

Kent CC Devise Detailed Code of Procedure

BY A SPECIAL CORRESPONDENT

A DETAILED CODE of procedure for contract variations has been worked out by Kent county buildings committee. Until this can be included in new financial regulations the committee have given authority for the principles of the plan to have immediate effect.

Dealing with this in their quarterly report, the committee says that following a reference by the education committee on the incidence of overspending on building contracts, necessitating supplemental votes, they have given the matter detailed consideration in the light of a report thereon prepared at its request jointly by the county architect and the county treasurer.

In relation to nine contracts which formed the subject of the reference the total expenditure covered by the original votes sanctioned by the county council was approximately £1½m. and the total overspending so far ascertainable amounts to £109,204, being roughly 7½ per cent, as summarised below:

(a) Increase in wages and prices of materials	£49,137
(b) Fees and incidentals not covered by original estimates	11,600
(c) Variations to Building, Engineering and Tarpaving Contracts	46,790
(d) Sundry extras, site conditioning, etc.	1,677
Total	£109,204

The committee observe that the major item relates to payments made under the fluctuations clause in the contracts which permits the contractors to charge certain increases in rates of wages and prices of materials not known at the time of tendering and therefore not specifically provided for in the tender.

Fees and Incidentals

As regards fees and incidentals mentioned in (b) above, these include the fees paid to outside firms of architects, quantity surveyors and consulting engineers, the salaries of clerks of works, and the cost of printing, etc. They point out that some of these expenses cannot be estimated with precision when the original forecast of cost of a project is made because they are necessarily dependent upon a variety of factors such as the actual period and the final cost of the contract.

From the detailed analysis of the figures given above, the committee are satisfied that about one-half of the total overspending of £109,204 is attributable to factors outside the council's control. Consequently, the excess expenditure due to contract variations and the like represents some 3½ per cent of the original votes of £1½m. a figure considered not to be unreasonable 'when regard is had to all the circumstances.'

Nevertheless, the committee are convinced that steps should be taken to ensure that the spending committees are informed at the earliest possible dat e all factors which arise and which are likely to involve overspendings. This would enable a measure of control to be exercised at the appropriate stages.

The report points out that contract variations may be divided into three categories as follows:

(i) Those due to technical considerations, such as extra site works;

(ii) those due to altered requirements, such as revisions to room lay-outs and additional fittings, and

(iii) those due to the amounts estimated for in the contracts being insufficient for various reasons, e.g., the withdrawal of the lowest quotations for specialist work and the consequent acceptance of the next lowest quotations at a higher cost.

It continues: 'In relation to the nine projects with which the education committee is concerned, the investigations have disclosed that in each of five of them the lowest tender exceeded the cost approved by the Ministry of Education. In view, however, of the urgency of the work, the contracts were commenced on the understanding that savings were to be effected by variations of work during the progress of the contracts. The outcome has confirmed that this is a most unsatisfactory basis on which to deal with building projects. It is essential that wherever possible sufficient time must be allowed for the architect to detail the variations and for the quantity surveyor to prepare a Bill of Modifications before the contract is entered into.

'Large contracts usually contain a substantial contingency provision designed to cover technical changes, particularly unknown difficulties in site works. This provision is often utilised in full for unforeseen items and, in the result, the original contingency provision is inadequate for all the technical changes found to be necessary during the progress of the work.

'A feature common to many contracts is that the spending committees are not notified until a late stage of the circumstances which might give rise to overspendings. There are, of course, practical difficulties in the way of anticipating the full impact of individual variation orders on the ultimate cost of a project, particularly so in the case of large contracts. However, as mentioned earlier, your committee is satisfied that unless the spending committees are informed immediately of the need for contract variations an effective measure of control over expenditure cannot be exercised.'

Financial Regulations

After dealing with the plans to amend the financial regulations, the committee say they accept that, in practice, it is necessary to hold a balance between the need for obtaining early committee approval to material changes in work under a contract and the need for giving the architect and the technical staff reasonable freedom to deal with difficult situations as they arise so as to avoid holding up the work.

The basis of the code of procedure to be embodied in the financial regulations is planned as follows:

Types of Contract Variations	Action to be Authorised by
(a) Variations due to technical reasons which will not cause the contract sum including the contingency provision in the contract to be exceeded.	(a) Supervising officer, normally the county architect.
(b) Variations due to technical reasons but expenditure involved will cause contract sum, including contingency provision, to be exceeded.	(b) Spending committee or chairman of spending committee or other authorised member acting under urgency procedure on behalf of spending committee. Recommendations to be submitted by the supervising officer, normally the county architect through the clerk of the council or head of the department as may be appropriate. During the course of the contract it is open to the county architect if the circumstances so warrant to ask for an increase in the contingency sum to avoid subsequent reference to committees and members on trivial items.
(c) Variations not due to technical reasons involving material alterations in the character of the building or the standard of its construction.	(c) As for (b) above.

'Technical reasons' would include necessary work not capable of being foreseen when the contract was let and alterations in materials specified due to the original materials not being available or not, on later information, being suitable for the job.

The committee add: 'Provided that the arrangements are carried out as envisaged and the initial estimating of variations is proved at final account stage to have been reasonably accurate, there should eventually be little need for supplementary votes at the final account settlement stage, except in respect of payments due under the fluctuations clause in the contract relating to increases in wage rates and cost of materials.'

The Town Planning Institute

Annual Conference at Llandudno

THE THIRTY-FIFTH ANNUAL CONFERENCE of the Town Planning Institute was held at Llandudno from May 31 to June 2, inclusive, under the chairmanship of the President, Mr. Rowland Nicholas, CBE. There was a full programme of papers and discussions, tours to places of interest and social events.

'Planning at the Crossroads.' On Wednesday, May 31, a stimulating paper under the above title was read by MR. LEWIS K. KEEBLE, MC, BSC, MA, FRICS, MTPI, Director of Studies, Department of Town Planning, University College, London. After summarising the aims of planning, the lecturer dealt critically with many aspects of current practice including Regional Planning, Green Belts, Development Plans, Residential Density, the Redevelopment of Town Centres and Faults in Planning Administration. On the last subject we quote his remarks in full.

Faults in Planning Administration

I should like to say a word or two, said Mr. Keeble, about things in which, it seems to me, local planning authorities could do without ministerial change of policy or new legislation.

They could, I think, employ more staff in preparing detailed proposals. Their existence is a great help in the administration of development control. Every year dozens of talented young men and women enter the planning profession, of whom many would be fully capable, after being adequately briefed, of preparing unsupervised, detailed planning proposals, provided of course that their efforts were vetted before submission to committees. Somehow this talent should be much more fully used.

I am sure that in counties where there is a very considerable amount of delegation, the authorities exercising delegated powers are allowed far too much rope. Why are county councils so scared of their district councils?

I wish that planning officers could be encouraged to give rather more vigorous evidence at inquiries, and evidence which seeks to go to the root of the planning issues involved. I wish, too, that they would draft amplification statements in the same spirit. Far too often the planning officer gives evidence which is little more than a formal recital of facts and a scanty general statement of policy. (Far too often, also, the inspector's report reveals a similiar superficiality.) But these are relatively minor opportunities for reform; if planning is to be put right we must look elsewhere.

Government Responsibility

The principal parties involved in planning are the Government, county councils and county borough councils, other authorities, and developers. All have achievements to their credit, but all are guilty of misfeasance and nonfeasance. In my opinion, the county councils on the whole are the least guilty, and the Government the most guilty, so I shall aim most of my remaining remarks in that direction.

First, it is patently an illusion to think that local government can carry out the biggest planning jobs without Government aid. The present Minister seems much too fond of urging local authorities to undertake for themselves tasks which are in their nature too big.

Second, it is an illusion to think that delegation on the scale laid down in the new delegation arrangements of 1960, still less on the even greater scale which seems to be threatened, can do anything but damage planning seriously. A little over a year ago I wrote an article on the subject which got me into a lot of hot water (*TPI Journal*, February, 1960). I still stand by every word of it. It is impossible to believe that in this respect planning has not been sacrificed to political expediency.

Third, if the Minister cannot for some reason set up a proper organisation to deal with regional planning, why does he not use his powers to form joint boards so as to cover the country with authorities at least able to carry out regional planning even if not ideally constituted to do so?

Fourth, why does he not take action to bring into existence development plans which mean something and are a real guide? He is constantly complaining about the vast numbers of appeals upon which he has to adjudicate. If there were proper development plans in appropriate detail, and if he supported the local planning authorities solidly in implementing them, there would inevitably be a great falling off in appeals, for the great majority of applications would either comply or not comply with the plan and appeals would lose their popularity.

These things are all urgent and desperately important, and I think there is little doubt that there would be strong public support for any action taken to improve matters which was well conceived and properly explained.

I should also like to urge the Minister to place more reliance upon the advice of his technical officers. It is a remarkable thing that in relation to appeals it always seems to be the most sensible recommendations by inspectors which are overruled by the administrators.

Why, above all, does the Minister not take a deep breath and create a reasonable compensation-betterment code?

Planning is caught in a frustrating log jam of inaction, and, though everyone concerned with it can do something to help, it is intrinsically impossible for anyone except the Minister to effect a decisive improvement.

How Can Planners Help?

What, finally, can members of the planning profession individually do to help? This is a crucial question, and a very difficult one to answer. One great difficulty is that so many of us are necessarily muzzled by virtue of our official positions, but those in local government are, after all, only muzzled in relation to the activities of their own authorities. They need not be silent with regard to general planning issues. I wish they would engage more fully in controversies, write more, draw more and talk more. The plain fact is that planning is important, it is beginning to recapture the public imagination, and the people who are capable of enlightening the public are, by and large, members of the Town Planning Institute. If they do not do it no one else will.

I am sure we should be much less humble about our professional status. We are the people who know about town planning, if anyone does, and we all of us need to assert ourselves a bit more. We have done the country a lot of good during the last fifteen years and need to persuade it to allow us to continue to do so at our full bent instead of in the present anæmic fashion.

Timber Content of Houses

'An Increase Possible'

AT THE ANNUAL LUNCHEON of the Timber Development Association, held in London on May 24, MR. HUBERT BENNETT, FRIBA, chief architect of the London County Council, told members of the Association that since the vast majority of homes were built on one or two floors a good case could be made out for increasing the timber content of houses in Britain. On the theme of design freedom, Mr. Bennett pointed out that the LCC had granted no less than 1,700 waivers where codes of practice were concerned. This, he thought, indicated recognition that codes of practice could never be ahead of the individual designer. It was an attitude that enabled architects to look at timber as a basic material and to develop its use with much more freedom.

Visualising wider adoption of timber frame construction, the speaker's points in favour of the technique included speed of erection, basic economies made possible by prefabrication, greater scope for the designer and quicker turnover of capital for all concerned. 'No eleven-inch cavity wall,' Mr. Bennett concluded, 'can have anything like the comfort of timber frame construction.'

Approved Domestic Appliances

THE LATEST OFFICIAL LIST of all appliances approved by the Domestic Solid Fuel Appliances Approval Council up to December 31, 1960, has been published jointly by the Coal Utilisation Council and the Solid Smokeless Fuels Federation. 'Approved Domestic Solid Fuel Appliances: List No. 18, 1961' may be obtained from the CUC, at 3 Upper Belgrave-street, London, SW1.

An artist's impression of the 43-storey Canadian Bank of Commerce Building, Montreal, for which 125,000 sq. ft. of Spoutcrag (Langdale Pikes) Green Slate, is now being used.
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The Week in Parliament

From Our Own Correspondent

Historic Buildings

A YEAR OF CONSOLIDATION and retrenchment. That is how the Historic Buildings Council for England describe 1960 in their report for that year published on May 17 along with the reports of the councils for Scotland and Wales. The Council for England comment that their 'ration' of funds had remained unchanged but by continuing to use a waiting-list of borderline cases they had been able to recommend the Minister to make grants for all the buildings which in their opinion were of the first importance.

The Council record their pleasure that the Minister of Works had stated that he would in future be prepared to consider recommendations for grants for outstanding groups of buildings. Thanks to this the Council had been able to advise the Minister to help the village of Blanchland where the whole village, which was in a single ownership, had been built into an old abbey and where the owners had drawn up a scheme for repairing and preserving it as a whole. Another instance of help was at Bradford-on-Avon. Other cases were proving less easy because of complications arising from a more haphazard distribution of buildings and diversity of ownerships.

The second innovation was the Minister's decision that in future chapels forming part of or within the precincts of an outstanding house and not in use as a parish church would be included within their recommendations.

The report also states that it could not be said too often that damp was the worst enemy of an old building. If signs of this were noticed and the warning heeded in good time, an immense amount of labour, expenditure and heartache might be saved and the evils of dry and wet rot avoided.

Other Business

Home Safety Bill

THE HOME SAFETY BILL, a measure introduced by MR. ALBERT COSTAIN to give the power to urban district and rural district councils to set up home safety committees, completed its passage through the House of Commons on April 21.

Building of Farm Institutes

SIR HARRY LEGGE-BOURKE asked the Minister of Education on April 27 for a statement regarding his plans for the building of farm institutes and similar establishments in England and Wales.

SIR DAVID ECCLES: 'I am anxious that everything possible shall be done to further the development of agricultural education, and for the year 1961-62 I have authorised a building programme of about £750,000 for farm institutes and other similar establishments in England and Wales. This is substantially more than in any previous year. It is the intention to continue building at this level for the next few years until the main needs are met. I shall shortly be inviting local education authorities to submit their proposals for 1962/63.'

Following is the list of establishments at which major improvements will be undertaken:

COUNTY	ESTABLISHMENT
England	
Bedfordshire	Mander College of Further Education (Agric. Dept.)
Buckinghamshire	County Demonstration Farm
Cumberland/Westmorland	Farm Institute
Essex	Institute of Agriculture
Hertfordshire	Institute of Agric. and Hortic.
Lincolnshire (Kesteven)	Farm Institute
Nottinghamshire	Farm Institute
Oxfordshire	Rycote Wood College of Rural Crafts
Shropshire	Farm Institute
Somerset	Farm Institute
Surrey	Farm Institute
Yorkshire (West Riding)	Farm Institute
Wales	
Breconshire	Rural Technical Institute
Cardiganshire	Farmers' Education Centre, Felinfach

Crossings on N. Circular-road

Plans to provide dual carriageways throughout on the North Circular-road with two-level junctions where necessary were mentioned in a written answer by MR. ERNEST MARPLES, Minister of Transport, on May 3. He added that preparatory work was in hand on a number of schemes and among those he hoped to authorise within the next two or three years were a flyover at Brent Cross, a dual carriageway scheme from Great North Way to Bowes-road and the Silver-street diversion. Further schemes would be carried out as resources permitted.

The Minister also indicated he was unable to give his decision yet on the proposed flyover at Gants Hill, Ilford. 'The engineering problems here are very complex,' he said.

Car Park at London Airport

MR. EDWARD DU CANN asked the Minister of Aviation on May 8 whether tenders had now been invited for the design and construction of a multi-storey car park in the central terminal at London Airport.

MR. THORNEYCROFT: 'The preliminary specification is now available and firms interested in this type of project have been invited by advertisement to apply for information. It is hoped to invite tenders in June.'

Nuclear Reactor for Research

MR. EDWIN WAINWRIGHT asked the Parliamentary Secretary for Science on May 9 if he had now reached a decision with regard to the application from the London University Imperial College of Science and Technology for permission to build a low-power nuclear reactor.

MR. DENZIL FREETH: 'The Government has now approved in principle the provision of three reactors which will be available to Universities and Colleges of Technology for teaching and research. One will be sited in Scotland and one in Lancashire. It is proposed to site the third in the London area. This will be available to the Imperial College as to other institutions in London. Negotiations on arrangements are continuing.'

Cost of School Places

MR. JOSEPH SLATER asked the Minister of Education, on May 11, how the average cost of schools built in 1955 compared with 1960; and what was the corresponding figure for 1950-51.

SIR DAVID ECCLES wrote: 'The average net cost per place of new primary schools was £158 in 1950, £143 in 1955, and £155 in 1960. The comparable figures for new secondary schools are £276, £244 and £271.'

Slum Clearance Progress

MR. CHARLES MAPP asked the Minister of Housing and Local Government on May 9 to issue, in respect of those authorities having long-term slum clearance tasks, details of the numbers of houses estimated to be unfit at the latest available date—what was the percentage of fit to unfit houses in each area.

MR. BROOKE issued the following:

Figures relating to houses estimated to be unfit in the areas of the local authorities listed in the Appendix to the White Paper on Housing in England and Wales Cmd. 1290.

		Houses estimated remaining unfit at March 31, 1961 (1)	Houses remaining unfit as a percentage of fit houses in the area (2)
Ashton-under-Lyne	B.	1,408	8·0
Bacup	B.	1,958	30·2
Batley	B.	3,552	24·4
Bilston	B.	1,001	10·9
Birmingham	C.B.	42,606	13·2
Bishop Auckland	U.D.	1,908	16·7
Bolton	C.B.	3,840	6·7
Bootle	C.B.	2,280	11·2
Bradford	C.B.	4,989	5·0
Brighouse	B.	1,114	9·6
Castleford	B.	1,249	9·7
Chester	C.B.	1,817	10·0
Colne Valley	U.D.	976	11·8
Coseley	U.D.	1,413	11·4
Crook & Willington	U.D.	1,605	18·2
Dukinfield	B.	1,043	16·9
Ennerdale	R.D.	1,552	17·0
Gateshead	C.B.	2,671	7·7
Halifax	C.B.	2,487	6·9
Hartlepool	B.	708	13·8
Heywood	B.	702	8·4
Huddersfield	C.B.	2,686	5·8
Hyde	B.	1,106	10·0
Kerrier	R.D.	1,842	26·7
Kidsgrove	U.D.	1,023	18·2
Kingston-upon-Hull	C.B.	12,915	14·3
Leeds	C.B.	17,114	9·7
Liverpool	C.B.	82,338	38·6
Macclesfield	B.	3,038	23·1
Manchester	C.B.	59,940	29·0
Merthyr Tydfil	C.B.	2,427	13·5
Morley	B.	2,025	13·6
Oldham	C.B.	11,000	24·9
Pembroke	B.	1,233	28·0
Preston	C.B.	4,691	12·4
Rawtenstall	B.	1,072	11·6
Rochdale	C.B.	3,985	12·4
St. Helens	C.B.	3,310	10·5
Salford	C.B.	8,950	17·8
Sheffield	C.B.	8,500	4·9
Spenborough	B.	828	6·1
Stalybridge	B.	1,588	19·6
Stockport	C.B.	4,894	9·9
Stockton-on-Tees	B.	3,105	13·3
Stoke-on-Trent	C.B.	11,557	13·6
Tredegar	U.D.	869	15·0
West Bromwich	C.B.	2,622	9·2
Wolverhampton	C.B.	2,793	6·3
Wrexham	R.D.	2,009	19·3
York	C.B.	3,478	10·5

Research on Farm Buildings

SIR LESLIE PLUMMER asked the Parliamentary Secretary for Science on May 16 what action was taken by his Department regarding research into farm buildings.

MR. DENZIL FREETH wrote: 'The Agricultural Research Council is conducting a survey of farm buildings in this country and is issuing a bibliography of farm buildings research publications. In addition the Council, in co-operation with the farmers concerned, is organising experiments with buildings on farms and contributing towards their capital cost; and much research supported by the Council in agricultural research institutes and elsewhere has important bearing on farm building design. Further, a great deal of the experience and research of the Building Research Station of the Department of Scientific and Industrial Research is applicable to farm buildings.'

Road Research at Crowthorne

MR. PHILIP N. HOCKING asked the Parliamentary Secretary for Science on May 16, what research aimed at reducing road accidents the DSIR expects to carry out on the new Road Research Track at Crowthorne.

MR. DENZIL FREETH: 'The Road Research Laboratory intends to research into many factors affecting road safety. These include skidding, the behaviour of vehicles during emergency braking, and when colliding with kerbs of various types and with fixed barriers or with other vehicles; also such traffic engineering problems as the layout of road junctions, the timing of traffic signals, control systems for junctions, and the design of road signs.'

Progress with Motorways

SIR WAVELL WAKEFIELD asked the Minister of Transport on May 17 to state, giving the mileage in respect of each, those motorways or lengths of motorways for which no line had yet been proposed, a draft scheme had been published, a scheme had been made, tenders had been invited, a contract had been placed, which were under construction, and which were in use, respectively, as at April 30.

MR. ERNEST MARPLES gave the following information:

Motorways in use.—London to Birmingham—73¾ miles; Preston bypass—8¼ miles; Lancaster bypass—11½ miles; Ross Spur—20¼ miles; Maidstone bypass—7½ miles.

Motorways under construction.—Birmingham to Preston—viaducts and sections in Staffordshire and Lancashire—53¼ miles; Birmingham to Bristol—Part I (Lydiate Ash to Twyning)—28 miles; Stevenage bypass—7½ miles; Doncaster bypass—15 miles; Medway motor road—Medway Bridge; London—South Wales: Slough bypass—5 miles—Maidenhead bypass—6 miles, and Severn Bridge.

Contracts placed.—None.

Tenders invited.—Birmingham to Preston—North Cheshire section—15 miles, South Cheshire section—10 miles; Medway motor road—25 miles; London—South Wales—Chiswick to Langley (Part I)—2 miles.

Grants for Closed Stoves

In the course of a long statement about the supply of solid smokeless fuel, MR. RICHARD WOOD, Minister of Power, indicated on May 18 that the Minister of Housing and Local Government had now decided that in smoke control areas in those parts of the Northern region where smokeless open fire fuels were scarce, grant might be paid on closed stoves which would burn hard coke of which large stocks were available in the area. Mr. Brooke would shortly explain the new arrangements to the local authorities concerned.

Royal Assent for Bills

The Berkshire and Buckinghamshire County Councils (Windsor-Eton Bridge, etc.) Bill received the Royal Assent on May 18. So did the Private Street Works and Home Safety Bills.

Distribution of New Factories

MR. DOUGLAS JAY asked the President of the Board of Trade on May 18 what percentage, measured by square feet, the total of new factory approvals of over 5,000 sq. ft. in the London and south-east region represented of total approvals in Great Britain in 1958, 1959 and 1960, respectively; and whether he would give similar figures for areas now classed as development districts under the Local Employment Act.

MR. NIALL MACPHERSON, Parliamentary Secretary: 'These percentages in respect of schemes mainly of over 5,000 sq. ft. for 1958, 1959 and 1960 respectively for the London and South Eastern Region were 21, 18 and 12, and for the areas now classed as Development Districts 10, 15 and 20.'

New Town for Glasgow Overspill?

MR. JAMES MCINNES asked the Secretary of State for Scotland on May 19 if he was aware of the necessity for another three new towns to deal with Glasgow's overspill problem and if he was now in a position to indicate the location of such new towns.

MR. J. S. MACLAY wrote: 'The question whether a fourth new town should be established to cater for Glasgow overspill, and where it might be, is at an advanced stage of consideration. Other measures to increase the contribution being made by the three existing new towns and by the local receiving authorities have been initiated and are already producing houses and employment in increasing numbers for Glasgow families.'

Points from Replies

'I have had no representations by local authorities about the effect that increasing immigration is having on their housing programmes.' *(Minister of Housing, May 16.)*

'The terms of reference of the Central Housing Advisory Committee's inquiry into housing standards expressly cover accommodation provided by private enterprise as well as that provided by public authorities.' *(Minister of Housing, May 16.)*

London County Council

Contractors' Estimates and Direct Labour; Strand Redevelopment

AT A MEETING of the London County Council on May 16, MRS. LEILA CAMPBELL asked the housing committee chairman whether it was true that in a number of instances the lowest tenders from building contractors were substantially in excess of the comparable estimates of the Council's architect. Mrs. Campbell asked whether he agreed that the Council was being held to ransom by contractors, and if so whether there were any plans for the extension of the direct labour force of the housing department as a preventive measure.

MR. PRICHARD, in his reply, agreed that building contractors' tenders were in excess of the architect's estimate, adding that current indications were that there was a hardening of the market in building costs. The architect's comparable estimate, he said, allowed for general rises in price and until last winter the lowest tender for housing work was almost invariably either below or marginally above that estimate. Since then, however, the comparable estimate had led the housing committee to reject all tenders on four occasions out of twenty.

The Council on January 25, continued Mr. Prichard, agreed to an extension of the direct labour force for the purpose of increasing the authorised output from about 400 to about 600 dwellings per year. The number of commencements in 1961, he concluded, was being adjusted accordingly.

MISS ALISON TENNANT questioned the chairman of the town planning committee about recent Press reports concerning a planning application proposing redevelopment of a large area on the north side of the Strand, including the Adelphi Theatre, Westminster (the Cities of London and Westminster). She asked whether it was proposed to demolish living accommodation and, if so, did the chairman agree that, in the report, there was no mention of replacing such accommodation? Miss Tennant wanted an assurance from the committee that, when considering the application, it would insist on mixed development with, if possible, an increase in living accommodation.

In his reply, MR. A. REGINALD STAMP said that it was the Council's policy when dealing with land previously used either in whole or in part for residential purposes to have regard to the need to provide such accommodation on redevelopment. Each application was, he said, considered on its merits. He could not anticipate the decision of the committee, which did not yet know the facts of this application. The point made by the questioner would, he concluded, be borne in mind.

Retirement of Housing Director

MR. A. V. WALKER, AIMTA, FI.HSG, Director of Housing for Woolwich MBC, is to retire on May 15.

COPPER

1 kep'ar; 2 cop'er, n.
1. *Chem.* A reddish ductile metal . . .
extensively used in the arts
(Funk & Wagnalls Dictionary)

ROOFING

covering with a roof:
materials for a roof: the roof itself
(Chambers's Dictionary)

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Cricket

Vitruvians v. NFBTE

FOLLOWING will represent the Vitruvians XI (the technical Press) in the annual game against the National Federation to be played on Thursday, June 8, at the Ealing CC ground, Corfton-road, Ealing, W5, starting at 11.30 a.m.:

Alan Day
R. Hirst
B. Brocklehurst (Tothill Press)
John Drew
R. D. Mudie (*Architects' Journal*)
Jack Young
A. Barnett (*Contract Journal*)
D. Ferguson (*A & BN*)
W. A. K. Faldo (*Official A & P*)
A. Watts (*IC & B*)
I. M. Leslie (*Builder*)
R. Binfield (*Contract Journal*) 12th man
L. McCarthy (*Contract Journal*) Umpire.

RICS Defeat Club Cricket Conference

THE CHARTERED SURVEYORS, playing their first cricket match since inaugurating their Sports Club last month, celebrated by beating a strong CCC eleven captained by Con. Davies, the President of the Club Cricket Conference. The game was played on May 17 at Catford. Scores:

CCC XI

Garrard, K. (Broadstairs)	run out	25
Hudson, D. (Upminster)	b. Harrison	11
Misso, J. (GW Rly.)	not out	67
Peters, J. (Wimbledon)	c. McDonald b. Alcock	32
Stickells, L. (BBC)	not out	5
Extras		10
	Total (for 3 wkts. dec.)	150

Did not bat: S. Way (Turnham Green), M. Pearce (Bognor), M. Firrell, M. Barton, C. Davies (Alexandra Park), D. Williamson (Clacton).

CHARTERED SURVEYORS XI

Eastall, D.	c. Barton b. Stickells	28
Trounce, C.	b. Barton	2
Brown, J. C.	l.b.w. b. Way	31
Burns, P.	b. Way	5
Goater, A.	b. Way	35
Drew, A. J.	not out	11
Pollard, J.	not out	31
Extras		8
	Total (for 5 wkts.)	151

Did not bat: C. McDonald (Bishops Stortford), D. Alcock (Forest Hill), B. Ballard (Northwood), C. Harrison (Hornsey).

For the CCC Misso batted attractively; although handicapped by a damaged hand he hit ten boundaries. He was well supported by Peters, adding 73 for the third wicket. The Surveyors' bowling, however, was so accurate that the innings lasted 2 hours 40 minutes during which 53 overs were bowled. Having about 2¼ hours in which to get the runs, the Surveyors were always in advance of the clock. Brown's was a fine knock and Goater was at the wicket only 24 minutes for his 35. Pollard hit 5 fours and a six in the same time. The winning run came with 25 minutes to spare, the total number of overs bowled being 37.

RIBA Draw With AA

THE RIBA CRICKET CLUB scored 182 for six wickets declared in a drawn match against the AA Cricket Club at Elstree on May 24; the AA scoring 77 for six. Top scorers were Lamming, 46, and W. E. A. Beeston 47, for the AA and RIBA respectively.

AUTOMATIC CONCRETE PLANT.—*The continuous batching and mixing concrete plant which was brought into commission recently at Staines-road, Hounslow Heath, Middlesex, by Greenham Ready Mixed Concrete Ltd. The plant is designed to produce up to 2 cu. yd. of mixed concrete per minute and will have an eventual capacity of 1,000 cu. yd. a day. It was designed, manufactured and installed by the Simdine Department of Richard Simon and Sons Ltd., Nottingham*

Civil Engineering Works

Method of Measurement and Conditions of Contract

THE COLLEGE OF ESTATE MANAGEMENT is organising a series of informal lectures on the civil engineering standard method of measurement and the general conditions of contract for civil engineering work. The series, to be held during October and November, will comprise six weekly lectures given at the College by Mr. G. C. Donnelly, ARICS, and Mr. Martin Silverstone, ARICS. The lectures are intended primarily for qualified members of the profession, particularly quantity surveyors, although there will be much to interest civil engineers. All lectures will commence promptly at 5.30 p.m.

October 4.—'The SMM of Civil Engineering Quantities,' an explanation of sections I and III of the document dealing with 'Definitions,' 'General Principles' and 'Rules for Preparing the Bill of Quantities'; and 'The Chartered Quantity Surveyor's Approach.'

October 11.—'The Essential Differences in Methods of Measurement.'

October 18.—'The Measurement of Works not Normally Encountered in General Quantity Surveying Practice.'

October 25.—'The Special Hazards of Civil Engineering Work and their Effect on Tendering and Remeasurement.'

November 1.—'The Varying Types of Civil Engineering Contract.'

November 8.—'The Presentation and Negotiation of Claims.'

Student Heating Engineers

Increased Pay Prescribed in New Indentures

THE RATES OF PAY for student apprentices prescribed in the indenture issued by the Association of Heating, Ventilating and Domestic Engineering Employers, will be increased as from July 3. A note of the new weekly rates is set out below:

Age Group	London s.	All other Districts s.
16-17	75	65
17-18	85	75
18-19	105	95
19-20	125	115
20-21	150	140
21-22	180	170
22-23	210	200

Under the indenture, student apprentices study by day release for their ordinary national certificate in mechanical engineering and if successful are entitled to attend the one-year full-time diploma course at the industry's National College for Heating, Ventilating, Refrigeration and Fan Engineering. Students receive full pay during the year they attend the diploma course and if they gain their diploma this gives them exemption from certain examinations of the Institution of Heating and Ventilating Engineers.

Co-operation Between Main and Sub-Contractors

Conclusions of LMBA/FASS Joint Conference

A REPORT of the joint conference on co-operation between main contractors and sub-contractors in the building industry organised by the London Master Builders Association and the Federation of Associations of Specialists and Sub-Contractors, which was held at the Sundridge Park Management Centre from March 27-30 last, has now been published, and is obtainable, price 2s. 6d., from the LMBA, 47 Bedford-square, WC1.

The object of the conference was to explore the existing methods of liaison and communication between main and sub-contractor, and to suggest improvements.

Opening Address

An opening address was given by MR. A. B. WATERS, MBE, GM, FRIBA, FIARB, on the first evening of the conference. Mr. Waters pointed out that modern building has become so complex that it is unusual to find in one organisation all the skills necessary for the erection of a building. As a result the use of specialist firms has developed who may, collectively, be responsible for 60 per cent or more of the work in a contract.

The work done by the architect and the nominated sub-contractor at the design stage, Mr. Waters continued, should facilitate the work of the main contractor by providing full information which will help him to tender realistically. The standard form of invitation to tender for sub-contractors is still awaited, but should provide the answers to such questions when it is in use.

If the sub-contractor is not nominated, but the work specified, the work normally done between the architect and the sub-contractor will be carried out by the main contractor for submission to the architect, and the way in which this is to be done might merit some attention.

When the contractor and the sub-contractors are appointed the architect's last duty before work starts on site is to hold a 'briefing' meeting at which the main contractor and the essential sub-contractors are present.

After work has started on site, successful co-operation is almost entirely a matter of communications. Channels of communication established at a briefing meeting can break down during the progress of the work.

Brief reference must be made, Mr. Waters added, to the position of the consulting engineer in relation to the specialist sub-contractor, the main contractor and the architect in administering the contract. The engineer has a special relationship with the specialist for whose work he is responsible, but he has no standing in the contract and must be debarred from giving direct instructions. Instructions relating to specialist work and especially any that involve variations must flow through the architect to the main contractor.

Summary of Conclusions and Recommendations

Stage I

LIAISON between architect and design sub-contractor must be as full as possible and must always be directed towards the eventual provision of full information to the main contractor, when invited to tender.

A standard form of invitation to tender for sub-contractors (suggestions for which are put forward by the conference) is a matter of urgency.

In addition to the information to be supplied on the standard form of invitation to tender, further details will be necessary and are suggested in Para. 9 of the report.

A code of working principles with regard to general attendances for each sub-trade should be produced by FASS for incorporation with the standard form of invitation to tender.

During the main contractor's tendering period no further negotiations should take place between architect and sub-contractors.

If cases arise in which the architect is unable to nominate a sub-contractor beforehand he must be prepared to supply the main contractor with full details of the conditions to which such a sub-contractor, when named, will work.

A briefing meeting of all principals concerned in the contract should be called as soon as possible after the main contractor has been appointed, at which the architect should hand over the primary responsibility to the main contractor.

A second briefing meeting of those specifically concerned in the site organisation of the contract should then be called to decide methods of work.

Stage II

The order of site meetings must be clarified at the preliminary briefing meetings referred to above, and suggested arrangements for such meetings are outlined in Paras. 19-22 of the report.

Each sub-contractor should appoint a Site Supervisor.

Personal liaison on site, as it affects site supervisors in dealing with immediate problems, would be improved by the main contractor's representative arranging set times each day for consultation.

On a large contract, involving many sub-contractors, an assistant to the site agent should be appointed, with the specific duty of co-ordinating sub-contractors' work.

Site Management courses at supervisory level, common to sub-contractors and main contractors' staff, should be organised as soon as possible.

Liaison between main and sub-contractor with regard to working areas, continuity of work, alteration of plans, and clearing of rubbish must be improved.

The installation of a temporary ring mains system (110 volts) might be advantageous.

If the date of delivery of materials fabricated by a sub-contractor is postponed due to delays on site he should be entitled to an advance payment.

More care is required in the storage and off-landing of materials.

Welfare, safety and insurance co-ordination should be improved.

Sheffield Park Hill Flats Scheme

Criticisms of Cost and Building Time Answered

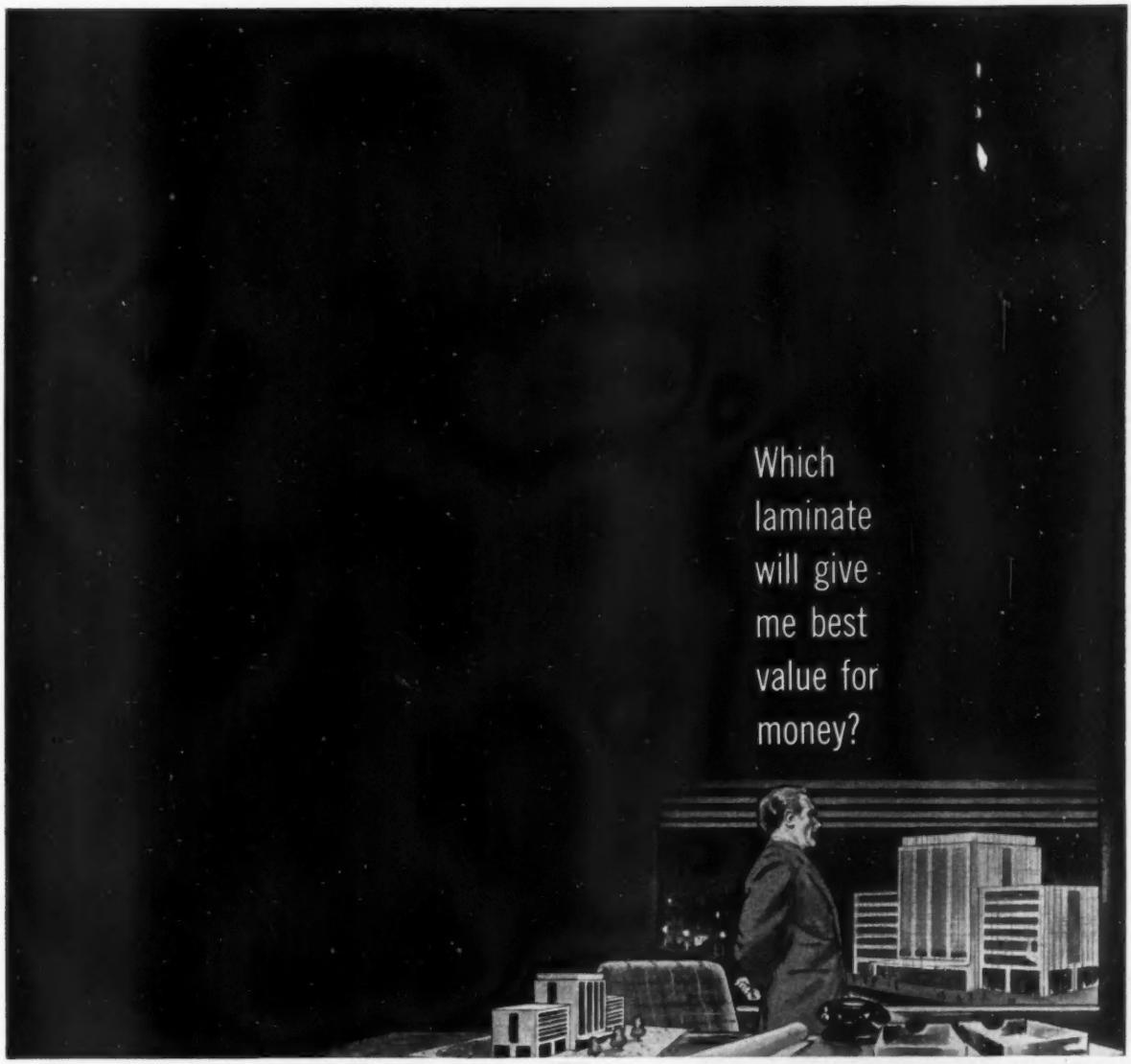
CRITICISMS of the cost and building time of the Park Hill flats at Sheffield constructed by the corporation public works department, were answered at a Press conference by CLLR. ROY HATTERSLEY, chairman of the public works committee, on May 19. The complaints had been raised during the recent municipal elections campaign.

He said that while final figures were not yet available, the cost of the work to date was over £150,000 below the outside quantity surveyor's valuation of the work carried out. He said it was also £320,000 below the next comparable tender, and £340,000 below the tender of one major contractor who was considered for the work. He added, 'If we had to borrow that £320,000, we would have had to repay each year, for 60 years, £14,820, and that would have totalled £889,200, equivalent to over 20 years' rent for Park Hill.'

On the question of time, Cllr. Hattersley said that the original contract time for 996 dwellings, four public houses, tenants' meeting room, shops and laundry was 36 months. But the average building time had proved to be 127 weeks, or 29.2 calendar months. He added, 'It must be remembered that the department during that period had other obligations to the corporation, including various capital schemes and the maintenance of 52,000 houses.

'The plans are now being completed for 1,000 dwellings to comprise Part II of the Park Hill redevelopment, in the Hyde Park area. We think the fact that the city architect specified the public works department as the appropriate contractors for the second stage is some indication of the general approval.'

In a report, MR. HENRY SMITH, general manager of the public works department, said: 'The speed of construction on this project is without parallel either in this country or in any country in Europe. This has been achieved with an outstanding economy in labour. An average of 204 men were employed, with an average labour force of 320 for a few months at the peak of activity. These numbers are very substantially less than those forecast by certain leading national contractors when interviewed after tendering for the work.'



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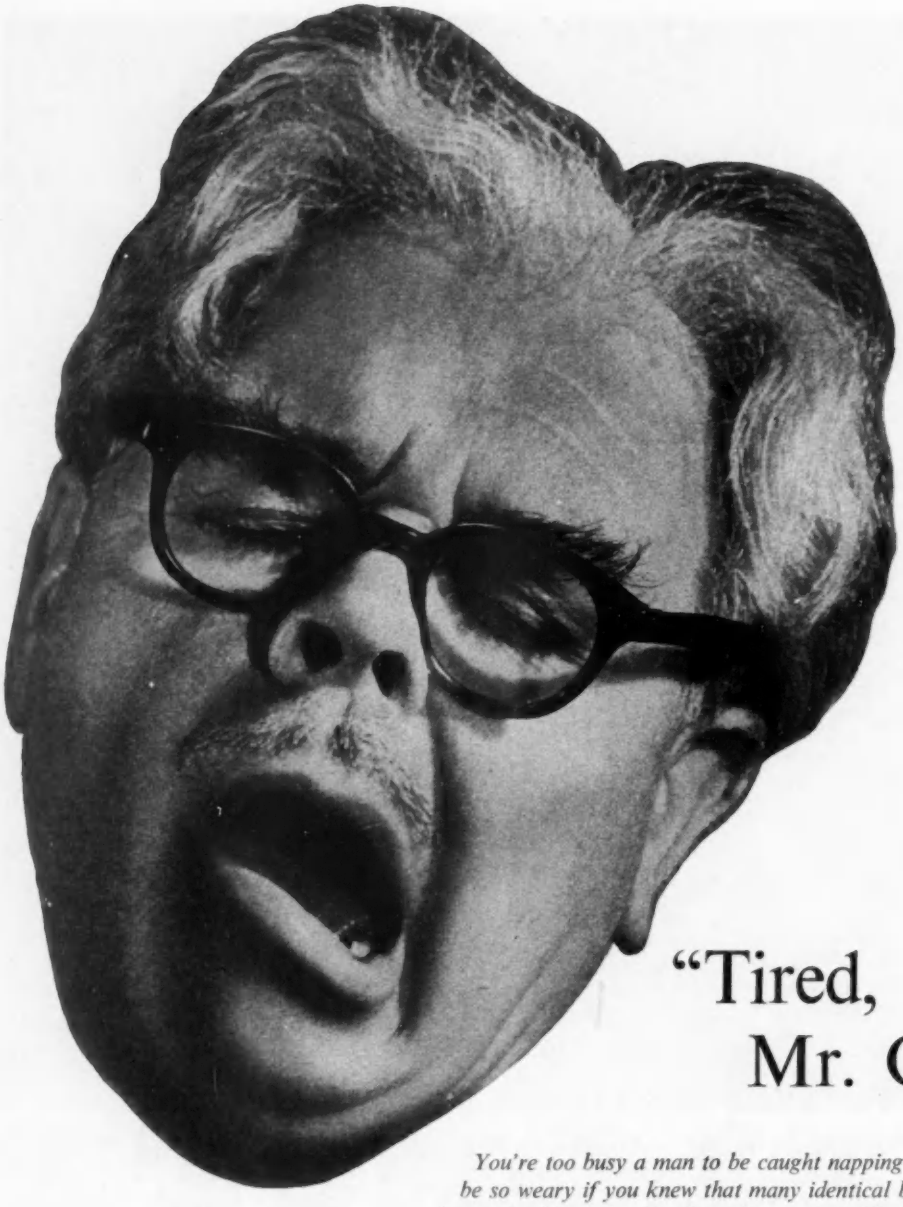

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Book Reviews

'Architecture in Italy'; 'New Japanese Architecture'; 'Space Between Buildings'

ARCHITECTURE IN ITALY. A Handbook for Travellers and Students. By Martin S. Briggs. (London: J. M. Dent & Sons, Ltd.) Price 15s. net.

WITH THE GROWING POPULARITY of continental travel there is an increasing demand for good guide books and handbooks dealing with aspects of the cultural background of the various countries. Mr. Briggs has written an excellent short history of architecture in Italy that should find favour with the travellers and students for whom it is intended. In some fourteen chapters he covers the whole story from the days before the Romans up to *circa* 1960, touching in chronological sequence on Roman architecture, Early Christian, Romanesque, Gothic, early, middle and late Renaissance, Baroque, Rococo, and the work of Fascism and after.

Mr. Briggs has compressed an immense amount of factual information into fewer than 200 pages of text, yet the book is no mere catalogue of styles, buildings and dates; and though scholarly and critical, as one would expect it to be with a writer of Mr. Briggs's distinction, it is eminently readable. Useful lists of buildings with their dates and (where known) the names of their architects are given at the ends of chapters. There are numerous illustrations including photographs and plans and sketches by the author.

It is interesting to note that Mr. Briggs, while deploring Mussolini's vulgarity, bombast and aggressiveness, pays ungrudging tribute to the dictator's treatment of architecture in Rome. The brief chapter on 'Architecture after Mussolini, 1943-60,' could be usefully expanded in the future editions of this admirable little book which will undoubtedly be called for. G. J. HOWLING.

NEW JAPANESE ARCHITECTURE. By Udo Kultermann. (London: Architectural Press.) Price 63s. net.

JAPAN'S NEW ARCHITECTURE, according to a note on the jacket of this book, 'is already so secure in its aims and its traditions that the Japanese themselves speak of it not as a foreign importation but simply as the re-awakening of Japanese architecture.' Looking through the 180 beautifully reproduced photographs of this book without previous knowledge of their provenance, one would not be disposed to regard the buildings as distinctively Japanese. Many, in fact, recall European and American prototypes, which is not surprising when we remember the Japanese aptitude for the sincerest form of flattery.

Here is an impressive collection of contemporary work, of which any nation would be proud. Much of it is official, including city halls, cultural centres, libraries, concert halls, museums, convention halls, an art centre, a television studio, hospitals, a swimming stadium, a memorial hall, an airport building, a postal building, and also a selection of commercial work including an international trade centre, an hotel, a factory, and a dairy, together with a variety of domestic work. There are numerous geometrical drawings, though not every building has a plan.

Herr Kultermann contributes a well-informed introduction under the headings of Fundamentals and Problems and Solutions and adds brief biographies of some two dozen of the leading Japanese architects. It is not surprising to find that some of them worked and studied in Europe and the USA.

G. J. HOWLING.

DESIGN AND DETAIL OF THE SPACE BETWEEN BUILDINGS. By Elisabeth Beazley, ARIBA, AADip. (London: Architectural Press.) Price 42s. net.

ALTHOUGH many may not agree with the author of this book that 'the spaces between buildings matter as much as, if not more than, the interiors of the buildings themselves,' there is no doubt that these spaces should be regarded as an integral part of architectural design. Often they get a good deal less attention than they deserve. Much closer study could well be given to the design of such elements as paved surfaces, walls and fences, which only too often are looked upon as unfortunate necessities, to be added as cheaply as possible.

Miss Beazley not only sets forth the principles of good design but demonstrates their application in a great variety of items, such as paving, trim, surface drainage, walls, fences, gates, parking, bicycle stands, steps and ramps. This is a very practical book, including not only a wealth of photographic and technical illustrations but an immense amount of useful information about the physical and aesthetic qualities, sizes, and suitability of varying materials for different purposes, together with notes on structural methods.

G. J. HOWLING.

NEW GALLERY FOR SCIENCE MUSEUM.—*The newly completed gallery built for the Ministry of Works by Y. J. Lovell Ltd. to house the South Kensington Science Museum's aeronautical collection. The tubular steel arches carry a metal roof which is of aluminium internally and copper externally. At the places where the arches pass through the glass walls can be seen bellows joints of copper, designed to take up expansion or contraction. A tea room is located at the far end of the gallery behind a glass screen. Other floors of the new building will house the transport exhibits of the museum, the ships collection, and the exhibits devoted to clocks and astronomy. It is hoped that building work will be completed during the summer. The new block has been designed in the chief architect's division of the Ministry of Works by Mr. W. Kendall, ARIBA. The foundations and frame of the building up to the first floor level were carried out by Messrs. Higgs and Hill Ltd. in 1950 to provide quarters for the science displays for the Festival of Britain*

Books Received

*** *Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

PLANNING RESEARCH. (London: Town Planning Institute.) Price 20s. post free.

EXPERIMENTAL BUILDING CRAFT SCIENCE. By C. R. Bassett. (London: Cleaver-Hume Press Ltd.) Price 7s. 6d.

THE PRACTICAL GUIDE TO OUTSIDE BUILDINGS. By J. H. Arnison. (London: Stanley Paul & Co.) Price 30s.

The Labour Scene

Alterations in Working Hours and Wage Rates

Amendments Effective from October 2

THE NATIONAL JOINT COUNCIL FOR THE BUILDING INDUSTRY on January 12 announced that: (a) as from October 2 the normal weekly working hours for operatives will be reduced from 44 to 42; and (b) that concurrent with the reduction in working hours the Grade A standard rate for craftsmen will be advanced to 5s. 6d. per hour.

The Council further decided to stress the vital need for achieving the highest possible rate of output within the reduced working week in order (a) to allow plant and equipment to be used to maximum capacity; (b) to offset as far as possible the increased costs that shorter hours will entail; and (c) to maintain the maximum volume of employment for the industry.

To assist in the attainment of these objectives and to permit full advantage being taken of daylight hours and good building weather, the Council decided that there should be modification in the matter of overtime control to the extent of one hour per day, Monday to Friday, and approved a revision of the existing provision in National Working Rule 2 concerning meal intervals.

At its annual meeting on April 26 the Council approved and adopted the amendments to Rule II(b)(i) of its Constitution and Rules and to its National Working Rules which were necessary to give effect to the decisions made. The following amendments will take effect from October 2, 1961:

CONSTITUTION, RULES AND REGULATIONS.—Rule II(b)(i), delete '4s. 9½d.' and insert '5s. 3½d.'

NATIONAL WORKING RULES.—National Working Rule 2.—Working Hours, delete the existing rule and substitute:

1. Normal Working Hours

The normal working hours shall be 42 per week throughout the year, arranged as follows: Mondays 8 hours per day; Tuesdays to Fridays (inclusive) 7½ hours per day; Saturdays 4 hours per day.

By arrangement between the employer and the operatives on a site, job or in a shop the normal weekly hours may be worked in five days, in which case the daily hours, to be worked at plain time rates, shall be: Mondays to Thursdays (inclusive) 8½ hours per day; Friday 8 hours per day.

The employer shall give immediate notice in writing of such arrangement to the Local Joint Committee.

2. Meal Intervals

In all cases there shall be a break or breaks for refreshment at a time or times to be fixed by arrangement between the employer and operatives at each site, job or shop. The breaks, which shall not exceed one hour per day in aggregate, shall include a dinner interval of not less than half-an-hour.

3. Starting Times

The actual time of starting work shall be as determined and published by the Local Joint Committee, provided that by arrangement between the employer and the operatives on a site, job or in a shop the starting time for that site, job or shop may be advanced by not more than half-an-hour, and provided always that in no case shall *normal* working hours start earlier than 7.30 a.m.

NATIONAL WORKING RULE 2A.— Paragraph 3, lines 9 and 10, *delete:* '(41½, or 44 as the case may be).'

Overtime Provisions

NATIONAL WORKING RULE 4—OVERTIME AND HOLIDAYS.—*Delete* the existing working rule and substitute:

A. Overtime—General Provisions

(i) Overtime shall not count until full time for the day has been made; this provision not to apply unless the loss of time is through the workman's own fault.

(ii) Overtime in excess of one hour on Mondays to Fridays shall not be worked except by consent of a Local Joint Overtime Committee which shall delegate to its officials the power to agree to overtime as aforesaid, but in the event of the officials failing to agree the application shall be referred at once to the Local Joint Overtime Committee. In the event of failure to agree, appeal may be made to the Regional Joint Committee.

Where work is carried out in a locality where no appropriate Local Joint Committee exists, arrangements respecting overtime workings shall be mutually arranged by the employers' and operatives' representatives concerned.

It shall be permissible for the employer to employ labourers on overtime in the preparatory work required before the normal starting time and also for the purpose of unloading materials which have not arrived on the job or works in time to be unloaded within the normal working hours.

(iii) The working of overtime by apprentices of 18 years of age and over shall be permitted in accordance with the provisions of National Working Rule 4, provided that no apprentice shall be required to work overtime on days when this would interfere with his attendance at technical classes.

(iv) When men start before the usual starting time they shall be paid at overtime rates for any time worked beyond the normal working hours for that day. In no case shall day-workers start before 6 a.m. Where men are unable to continue at work until the normal finishing time for the day, the time worked before the usual starting time shall be paid for at the appropriate overtime rates.

**B. Overtime Payments*

Overtime shall be paid for at the following rates:

(i) 5½-day week—Mondays to Fridays: first two hours — time-and-a-quarter; second two hours — time-and-a-half; afterwards, until starting time next morning—double time. Saturdays and Sundays: Time worked between normal finishing time on Saturday and 4 p.m.—time-and-a-half; afterwards, until normal starting time on Monday morning—double time.

(ii) 5-day week—Mondays to Fridays: First hour—time-and-a-quarter, next two hours—time-and-a-half; afterwards, until starting time next morning—double time. Saturdays and Sundays: First two hours on Saturday morning—time-and-a-quarter; thereafter, until 4 p.m.—time-and-a-half; from 4 p.m. on Saturday until normal starting time on Monday morning—double time.

**C. Holidays*

In each locality there shall be not less than five days of public holiday in each year, additional to Christmas Day. These days shall be jointly recognised by employers' and operatives' organisations as local holidays for the purposes of the building industry in that locality subject to confirmation through the machinery of the National Joint Council. On these days shops and jobs in the locality shall close down.

Work required to be done on the days so fixed and recognised as local holidays for the purpose of this agreement shall be paid for: (i) Christmas Day—double time. (ii) The other five or more days at time-and-one-half for the period of the normal working day and at double time thereafter, or at double time throughout where that premium rate for local holidays has been approved and prescribed for the locality in the regional and/or local working rules.

NOTE.—The references in the foregoing (Working Rule 4) to holidays and the defining of public or other recognised holidays are concerned with the computation of overtime payments. In regard to the taking of an annual holiday under the Annual Holidays Agreement, the manner of fixing the holiday time is subject to the following provisions in Clauses 4, 5 and 6 thereof:

4. Definition and length of holiday.—Each operative covered by the Scheme shall be granted two weeks of annual holiday, not necessarily in continuity. The word 'week' shall mean six consecutive working days. For the purpose of this agreement, Saturday shall be considered a working day (whether or not a five-day week is in operation), but no Sunday shall be considered as a working day.

*N.B.—Sections B and C are simply a restatement of the relevant provisions of NWR 4 in force as at the date of publication of this notice.

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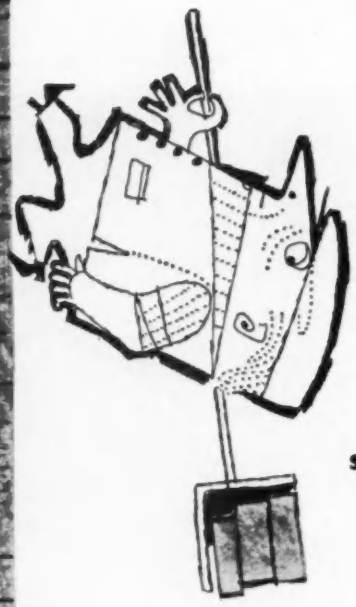

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In the event of any of the working days granted to an operative as his holiday coinciding with one or more of the statutory or public holidays recognised under the Working Rules of the Building or Civil Engineering Industries, the operative shall not be entitled to an extra day or days of holiday in substitution for such recognised statutory or public holiday or holidays.

5. *Time at which annual holiday weeks to be granted.*—(a) The weeks of annual holiday shall be granted during the summer period, namely between April 1 and October 31 in each year—subject only to (d).

(b) In relation to one week of annual holiday, the employer shall, after consultation with the operatives, decide at what time between the above dates the holiday shall be granted and whether it shall be taken by all operatives at a particular works or site at the same time or whether it shall be spread over a period. In all such cases the employer shall give to the operatives as long notice of this week of holiday as possible but not less than 14 days.

(c) The other week of annual holiday shall be granted at a date, also during the above summer period, to be decided by the employer, who shall give to the operatives as long notice of this week of holiday as possible but, in any case, not less than 28 days.

(d) In cases where circumstances have prevented individual operatives from having the week or weeks of annual holiday within the summer period as defined, the holiday shall be granted before March 31 in the next succeeding year by mutual agreement between the employer and the operatives concerned.

6. *Operative not taking the holiday.*—Any operative who is unable to take a holiday at the time decided upon by the employer, either because of accident or sickness or because he is required by the employer to work during that holiday, shall be granted his holiday by the employer as soon thereafter as is reasonably convenient.

Where any operative is so required by his employer to work during an annual holiday as decided upon by the employer, he shall be entitled to be paid in respect of work done during that annual holiday only at ordinary rates of pay, provided nevertheless that, in the event of the holiday coinciding with one or more of the recognised statutory or public holidays and the operative being required to work on such a day, he shall be entitled to payment for work done on that day at the holiday rate prescribed by the appropriate Working Rules of the Building or of the Civil Engineering Industry.

NATIONAL WORKING RULE 5—NIGHT GANGS.—Lines 10 and 11: *Delete* the words 'current in the locality (41½ or 44 hours).'

NATIONAL WORKING RULE 5A—REGULAR NIGHTWORK.—Para (i) line 1 *delete* '45' and *insert* '42½'. Para. (i) line 2 *delete* 'nine hours' and *insert* 'eight and a half hours.' (It is to be specially noted that none of the foregoing amendments to the Rules becomes effective before October 2, 1961.)

Wage Rates and Bonus-Incentive

A Case for Joint Consideration

BY A LABOUR CORRESPONDENT

AN INTERESTING VIEWPOINT on the 1961 wages and hours settlement has been introduced by Mr. T. V. Hutchins (Editor, 'The Surveyor'). He argues that most people seem to forget the psychological effect of increases in earnings; there is generally a conscious or sub-conscious resolve to respond, and a reward produces feelings of satisfaction and encouragement. He proceeds from this to the arithmetic. Whilst the actual increase is about 10 per cent, this relates only to 37 per cent of total building costs; the remainder is materials 43 per cent and 20 per cent for on-costs and profit. Thus any increase in costs could not exceed 3.7 per cent. However, it is his opinion that this figure would be unjustified. Taking into account the natural rate of technical advance and his point as to 'psychology,' he flatly states that the increase in costs should be 2½ per cent—no more. He is speaking in terms of averages, of course.

One reads this with mixed feelings. It would be charming if it was true that the operatives were grateful and appreciative of a generous settlement. There would, no doubt, be much happiness in the land; no more sullen scowls or frustration, no fiercely argued comparisons with other industries in the site mess rooms or local branches, just smiles and redoubled efforts.

Fresh Wages Claims 'Inevitable'?

But alas, there is no echo of Mr. Hutchins's assumption of innate nobility in the motions on the agendas of the forthcoming union conferences. Some of the terms employed are disrespectful towards the union negotiators—if we are permitted to put it euphemistically. Of course, allowances have to be made; it goes without saying that those dedicated gentlemen who sweat through the night writing motions for conferences are the vanguard. It is possible, just possible, that the great mass of the operatives really are satisfied with the 1961 settlement and that the discontented are the few. To take bets on this would, however, be imprudent.

No less a person than Mr. A. G. Austin, the new General Secretary of the painters' union, has said very firmly that a fresh wages claim in November is 'inevitable.' We thus appear to be marching towards a standard craft rate not far short of 6s. per hour. To the large and medium firms this may not look disastrous: in the industrial areas they are paying this and more. But to the family business in the less populated centres it may well seem unjustified.

It is probable that the concept and practice of the standard national rate is under greater stress than at any time since the 1920s. The cross fire comes from two disparate directions: we have those in high places advancing the view that wage rates ought to be graduated in consonance with a man's 'value' or 'worth'; and we have pressure from the booming centres for rates much higher than, say, at Cheltenham.

The latter view is mounting to a crescendo in certain areas. It is not unusual for building operatives directly employed by manufacturing concerns to be paid rates well in excess of 6s. per hour. The oil companies, the new petrochemical industry, the plastics firms, the asbestos manufacturers, the engineering works—all are breaking ranks and seem almost insistent on raising wages substantially above the rather wan-looking building rates. Here we see the 'differentials' in pay with a vengeance. Yet even in building itself there seems to be a widening gulf between the alteration to a provincial bank and the erection of a city office block. The former will involve first-class, highly trained craftsmen at little more than standard rates. The latter will witness the payment of thumping big bonuses which hoist earnings to almost double time—and yet demand the craftsmanship to be but mediocre. It is the economics of the job itself which determines the amount of plunder.

Back to the History Books

We have to resort to historical research to rescue us from the appalling tensions of the contemporary scene. A rip-roaring boom with employers competing for labour is not likely to continue indefinitely. Our hard-pressed comrades who man the NJC can console themselves with the thought that they are right—absolutely right—to keep to their course. A national standard of wages is an intrinsically good policy—for all parties. It may be under attack—the ephemeral conditions of the time may challenge its validity—yet the entire future of the industry, its cohesion and orderliness, depend on the cool heads which sit in concert behind those mahogany doors at 82 New Cavendish-street.

What they have to do is obvious; they must gently lead the nervous and the timid into the new world of high wages and ascending efficiency. The two are inseparable. It is in this light that we have to view the 1961 settlement. To say that it is unique, dramatic, courageous, is to elevate it beyond its value. Posterity may well look at it as a mere pimple on the bosom of time—albeit a pretty interesting pimple.

We must not forget that it was a package deal. Somehow or another the industry had to be brought into line with the hours movement, to be dragged—kicking and screaming, if necessary—into the modern world of the 42-hour week. All other major industries were in front of us, and to equate conditions of boom with ultra-conservatism would have been more than a trifle unrealistic. In this light the increase is a simple 3d. per hour—not particularly exciting in these days of 1s.

per hour increase for the electricians and the doubling of land values.

But, of course, the struggle over the lolly is not confined to the standard rates. When, in 1947, the industry lurched into the orbit of incentive bonus, there were agonising wails from many quarters—from both employers and operatives. Time has soothed these cries; we are now confronted with the fact that a proportion of the labour bargain is negotiated at site level. Some have chafed under the distressing vagueness of the incentive-bonus agreement—admitted in 1951 to be temporary—and the existing disorder is an affront to their tidy minds.

Bonus Targets

Probably this had something to do with the action of the AUBTW in issuing a guidance booklet to its members which recommends actual targets of output. The NFBTE promptly 'repudiated' this piece of private enterprise, as of course it was almost bound to do in face of its own inability to obtain uniformity. The response to this publication might be expressed as one of sympathetic understanding of the difficulties of the NFBTE; it is indeed a vast problem to draw the strings around thousands of member firms which vary from the tiny to the colossal. But the AUBTW felt stung to tartness. Its journal inquires: who asked the NFBTE for its approval or otherwise? As a union it has just as much right to issue guidance to its members, it claims, as, say, the NFTBE has to bombard its constituents on the menace of Direct Labour.

It would seem virtually certain that the action of the AUBTW will be emulated by other unions sooner or later; saving, of course, the possibility of a more definitive national agreement on bonus. We are really faced with the awkward position that the NJC has willed the end but is coy about the means. Thus there is a vacuum, and any schoolboy can tell us what happens to a vacuum.

Tea Breaks

To view then the wages issue alone deprives us of stereoscopic vision. Bonus and the standard rates are interrelated and a solution to one must be reconciled with the other. The furore over the tea break question has reached a dormant level. The initial clash of angry words, assertions, and indignant denials has not led (let us be grateful for these small mercies) to anything worse. To re-examine the new rule on meal breaks under the microscope is pretty unrewarding. Neither is it profitable to gum the leaves back on the trees.

The question surely is one for site and shop level discipline. At any rate most employers are wise enough to handle the situation warily—there is little point in stirring up wasps' nests over a simple cup of tea. If some are diabolical liberty-takers they would be so over any issue, tea break or no tea break. It is the job of management to manage, and the kindest thing would be to shut up about the whole rather trivial episode.

Builders' President on Tea Breaks

Call for Firmness by Employers

A CALL FOR FIRMNESS on unpaid tea breaks by building employers is made by the President of the Eastern Federation of Building Trades Employers, MR. C. E. WADLEY, in his half-yearly review which he presented to the Federation's summer meeting at Clacton on May 30. He refers to the fact that the Chancellor has stated that the most recent wage round has provided increases beyond the rate of productivity increases. By tightening up on tea breaks and redoubling efforts to increase production, however, the cost of the building industry's latest wage award [6d. per hour and a reduced working week from October, 1961] may to some extent be met.

Commenting on the attitude of the Unions towards this matter, Mr. Wadley says 'While the Unions are showing no misunderstanding on the reduced working week and a wages increase of sixpence per hour, there appears to be a curious loss of clarity of thought when it comes to the interpretation of the agreed revision of the Rule relating to refreshment breaks. One hopes that their customary mental acuity on wages and kindred matters will return in sufficient time for the Unions to advise their members that refreshment breaks will be unpaid from next October.'

Memorandum Issued to Members

Members of the Eastern Federation had received a special memorandum setting out clearly the meaning and purpose of the amendment to the Working Rule, which the President hoped, would eliminate the wasteful and costly practice of paid tea breaks which had grown up in the building industry over the years.

The President added that in relation to the economic position of the building industry, capital investment was rising and the industry continued to experience a heavy demand for its services. 'The confidence, which ebbed somewhat two years ago has now been fully restored,' he says. 'This is reflected in the figures for apprenticeship recruitment, which in the first four months of the year have shown a 10 per cent increase on the corresponding period of 1960 and 50 per cent more than in 1959.'

Housebuilding Difficulties

On housebuilding, Mr. Wadley refers to the difficulty which some of the smaller firms are finding in competing with the financial strength of national developers and speculators. Nevertheless in spite of the land shortages, housebuilders continue to be very fully employed.

Finally, on building costs, the President says that stability now appears to be a thing of the past. To the uncertainty of labour and materials prices the Chancellor has now added the further hazard of a payroll tax which can only be regarded as a revenue-raiser adding to industrial costs and falling particularly heavily on an industry such as building where the labour content is high. 'The value of firm price tendering is such, however,' concludes the President, 'that while pressing steadily for closer observance of the essential conditions (namely, proper pre-planning by architects and their clients) the Federation feels that this spur to efficient building should not be removed.'

OXFORD ROAD STATION, MANCHESTER.—*Grooved acoustic board has been used to form the ceilings of the ticket office and waiting room of the new Oxford-road Station at Manchester creating a bold decorative pattern. Architect in charge was Mr. Max Clendinning, ARIBA, for British Railways, Midland Region. This station was fully illustrated in 'The Builder' of June 10, 1960*

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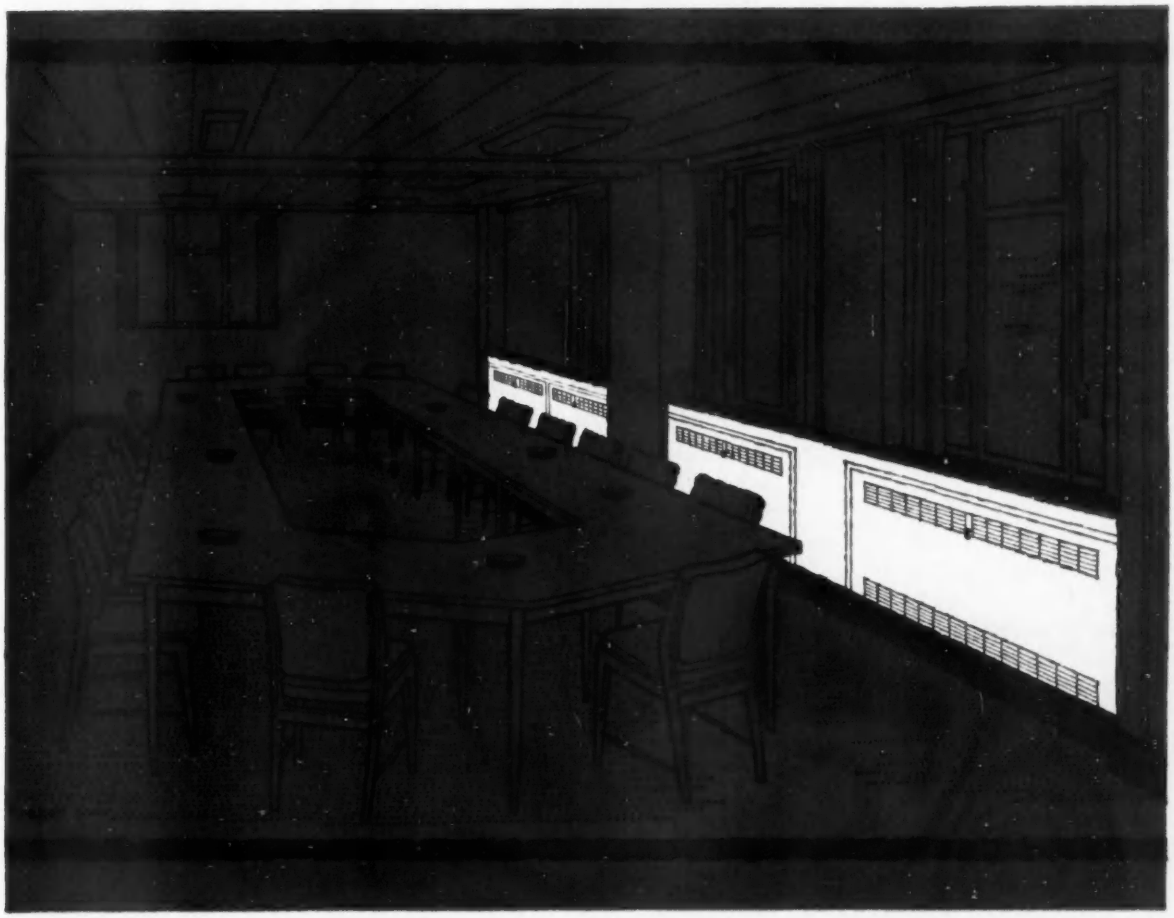

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THE BUILDER LONDON MEASURED RATES

These prices for new building work in London normally appear in the first issue of each month only. The prices are inclusive of all allowances for National Insurance, Holidays with Pay and Public Holidays, Third Party Risk, Travelling Allowances and Guaranteed Week. They cover a profit of 10 per cent on the prime cost without any addition for establishment charges.

These rates do not include for Foremen and other preliminary items, such as office, sheds, plant and scaffolding, etc., and these must be added accordingly.

The basic cost of the labour and materials used in arriving at the rates has been derived from the 'Current Prices of Materials' published in *The Builder*.

The data given are copyright. While every endeavour is made to ensure accuracy, we do not hold ourselves responsible for any error that may occur.—EDITOR.

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	s. d.	s. d.	s. d.	s. d.	s. d.
Surface excavation to shallow depths	8 3	10 3	11 9	17 10	46 0
Bulk do. or large trenches, etc., not exceeding 5 ft. deep ...	7 6	9 4	10 9	15 10	42 0
Trenches do. under 4 ft. 6 in. wide and do.	10 0	12 1	14 0	20 8	55 0
Pier holes and similar under 6 ft. square and do.	11 3	13 10	16 2	23 9	61 6
Additional throw for every 5 ft.:					
Bulk excavation	3 9	3 9	5 5	5 5	6 2
Trench ,, ...	5 0	5 0	6 8	6 8	7 8
Pier ,, ...	5 7	5 7	7 6	7 6	8 6
Return, fill and ram	5 2	5 2	6 8	6 8	8 2
Wheeling surplus n.e. 100 yds. run and depositing	7 2	8 0	8 0	8 0	9 0
Underpinning in trenches ...	13 4	18 6	21 6	30 9	—

		s. d.
Loading lorries and transporting to tip	Yd. cube	16 5
Basketing out and depositing	,,	10 0
Planking and strutting to sides of surface or basement trenches :		
Depth up to 5 ft.	Ft. sup.	6
,, ,, 10 ft.	,,	8
,, ,, 15 ft.	,,	9
Hardcore :		
Filled-in layers and consolidated	Yd. cube	22 3
do. 4 in. thick	Yd. sup.	3 3
do. 6 in. thick	,,	4 4

CONCRETER

	Basic yard cube rates			
	1:12	1:3:6	1:2:4	1:1½:3
Aggregate	1½ in. all-in	1½ in.	¾ in.	½ in.
Concrete in normal foundations : (minimum 6-ton cement loads)—	s. d.	s. d.	s. d.	s. d.
Portland cement standard specification	66 11	75 1	82 5	86 9
Portland cement rapid hardening	68 2	76 11	84 11	90 1
Water-repellent cement	70 11	80 10	90 8	97 3

		s. d.
Add to above basis for :		
4 in. surface beds	Yd. sup.	7½
6 in. ,, ,, ...	,,	8½
(If above two items worked around mesh reinforcement, add 5d. per yd. *super.*)		
Foundations in underpinning in short lengths ...	Yd. cube	16 4
Beds and flaunchings to drains	,,	8 2
Pier or stanchion foundations—small	,,	4 1
Sundry small items not exceeding 3 ft. cube in plinths, curbs, padstones, etc.	,,	21 6

REINFORCED CONCRETE

ADD to above 'Basic Yard Cube Rates'

		s. d.
Reinforced concrete including working around reinforcement between formwork and hoisting to normal levels :		
Foundations and similar	Yd. cube	5 5
Isolated stanchion or pier bases	,,	6 5
Walls not exceeding 6 in. thick	,,	26 8
,, ,, ,, 12 in. ,, ...	,,	18 8
Suspended floors or flat roofs 4½ in. thick	Yd. cube	21 6
,, ,, ,, ,, 6 in. ,, ...	,,	17 5
,, ,, ,, ,, 9 in. ,, ...	,,	14 10
(Beams attached to floors or flats, *add* 6/8 yd. cube)		
Isolated beams or lintels average 72 sectional inches ...	,,	32 3
Do. average 144 sectional inches	,,	24 1
Columns or stanchions average 72 sectional inches	,,	37 8
,, ,, ,, ,, 144 ,, ,,	,,	29 5
Staircases and landings, etc.	,,	56 1
Shell roofs average 3 in. thick, including labour forming curved surface	,,	133 3
Hollow tile floors :		
Hollow clay tiles 4 in. thick with 1 : 2 : 4 concrete ribs at 14 in. centres with filler tiles and 1½ in. fine concrete screed (excluding reinforcement and form work)	Yd. sup.	19 4
All as above but 6 in. thick clay tiles	,,	23 5
,, ,, ,, ,, 9 in. ,, ,, ,, ...	,,	32 7
Sundry items :		
2 in. concrete (1 : 2 : 4) blinding bed	Yd. sup.	5 0
Spade finish to concrete beds	,,	10
Trowel ,, ,, ,, ...	,,	1 10
Laying to falls and currents	,,	1 0
Hacking concrete by hand	,,	2 8
Hacking concrete by use of proprietary liquids ...	,,	1 7
Damp-proof membrane in three coats with sanded key	,,	4 10
⅜ in. Bitumen expansion joints 4 in. deep in floors ...	Yd. run	3 11

	Mild steel rods (round) cut, bent, hooked, wired and fixed complete (Ex. London Stock)			
	¼ in.	⅜ in.	½ in.	⅝ to 1 in.
Reinforcement :	s. d.	s. d.	s. d.	s. d.
Floors beams laid in only ...	88 6	79 4	73 8	70 3
,, ,, ,, wired into frames	100 7	90 0	85 10	80 3
Walls wired into frames	100 7	90 0	85 10	80 3
Columns wired into frames ...	100 7	90 0	85 10	80 3
Staircases wired into frames ...	102 11	92 4	88 2	82 7

		s. d.
Steel mesh fabric reinforcement :		
Laid in floors including laps and straight cutting and wiring, etc. :		
Weight 3.94 lb. per yd. sup.	Yd. sup.	4 3
,, 4.71 lb. ,, ,, ,, ...	,,	4 6
,, 9.32 lb. ,, ,, ,, ...	,,	8 4
Raking cutting worth 6 in. material cost per ft. run		
Circular cutting worth 9 in. material cost per ft. run.		
Formwork (Sawn) including strutting, easing and removal and average four times use of timber :		
Soffit of floors and flat roofs	Yd. sup.	16 9
Sloping soffits of stairs	,,	22 10
Barrel-vault soffits of floors and roofs	,,	21 4
Vertical sides of walls	,,	16 0
Battering sides of walls	,,	20 10
Columns	Ft. sup.	2 5
Lintels and beams	,,	2 7
Staircase strings cut to tread and riser	Ft. run	3 7
Edges of concrete floors, etc., up to 12 in. deep per inch in height	,,	2¼
Rebates or similar per inch girth up to 6 in. girth ...	,,	2½
Raking cutting	,,	8½
Extra cost for wrought shuttering and labour rubbing down to leave fair face on concrete ...	Yd. sup.	2 7
Pre-cast Concrete (1 : 2 : 4) including fair face :		
4½ in. x 6 in. reinforced lintels	Ft. run	3 0
9 in. x 6 in. ,, ,, ...	,,	5 3
9 in. x 9 in. ,, ,, ...	,,	8 7
Steel Formwork :		
Steel shuttering forms with patent expanding floor centres and telescopic props not less than four times use on each job with continuous use ...	Yd. sup.	11 6

Partitions : (Minimum 100 yd. super)	*Yd. super rate*			
	2 in.	*3 in.*	*4 in.*	*6 in.*
	s. d.	s. d.	s. d.	s. d.
Clinker concrete slab partitions in cement mortar	9 8	12 2	14 2	—
Cranham terra cotta slab partitions in cement mortar	14 1	17 0	20 0	—
Moler partition block partitions in cement mortar	19 10	23 0	25 11	—
Thermalite-Ytong partition blocks in cement mortar	—	15 8	19 4	27 7
'Phorpres' hollow clay partition blocks in min. of 6-ton loads ...	10 3 (2½ in.)	12 2	15 2	24 11

Cuttings :

Raking cutting and waste = ⅓ of ft. sup. rate
Circular " " " = ½ of ft. sup. rate
Cutting around openings = ¼ of ft. sup. rate
Cutting and bonding at angles, intersections and ends all at 6d. ft. run.

BRICKLAYER

	Yd. super rates			
	Plain flettons	*Rough stocks*	*Second stocks*	*Blue wire-cuts*
	s. d.	s. d.	s. d.	s. d.
Brickwork in cement mortar (1 : 3) reduced to one brick thick	38 5	51 8	61 4	92 4
Deduct if in 1 : 1 : 6 cement-lime mortar	10	10	10	10
Add if in :				
Filling in openings	5 8	5 8	5 11	7 2
Backing to masonry	2 10	2 10	3 0	3 8
Building overhand	1 10	1 10	1 11	2 2
Raising on existing work	2 10	2 10	3 0	3 8
Circular on plan to quick sweep ...	5 6	5 6	5 9	6 10
Small detached piers, plinths, etc.	8 4	8 4	8 9	10 5
Underpinning	5 6	5 6	5 10	6 11
Brick-on-edge walls	13 2	18 2	21 2	—
Half-brick sleeper walls honeycombed	13 9	18 7	—	—
Half-brick walls	21 6	29 3	33 11	50 8
do. with fair face and pointing both sides as work proceeds	24 8	—	37 3	54 6
One-brick wall with fair face and pointing both sides as work proceeds	43 8	—	66 4	98 2
11 in. cavity brick wall with two half-brick skins with 2 in. cavity and three galvanised iron twisted ties to every yd. sup.	46 3	—	71 2	—

Sundry items :		s. d.
Horizontal double slate damp-proof course ...	Ft. sup.	3 4
Vertical " " " " ...	"	4 1
Hessian-base bitumen damp-proof course	"	1 6
Levelling and preparing for raising on	"	1 0½
Cutting, toothing and bonding new to old	"	3 8
Wedging and pinning with slates in underpinning ...	"	5 2
Rough cutting	"	6
Cutting and fitting brickwork around steel	"	6
Bed and point frame one side	Ft. run	4
Rough cutting squint or birdsmouth	"	6½
Labour plumbing angles on faced work	"	2½
Rake out and point to lead flashing	"	7½
" " " " stepped flashing	"	10½
Cutting groove for skirting and point	"	1 7
Shallow chases for small pipes and conduit	"	1 9
Metal reinforcement 24 gauge 2½ in. wide	"	4½
Faced work : (Flemish bond) :		
Add or deduct for every 10s. per 1,000 difference from basic price of common bricks in Flemish bond in solid work	Yd. sup.	9
do. to half-brick wall in stretcher bond	"	6½
Add for extra labour to each side in facings and pointing as work proceeds	"	3 2
do. butt joints raked out and pointed with special mortar	"	6 3
If built in English bond, add 12½ per cent to above items.		
Labours :		
Fair cutting	Ft. run	1 1½
Fair circular cutting	"	1 4
Fair squint or birdsmouth cutting	"	1 9

Copings :		*9 in. wall*	*14 in. wall*
		s. d.	s. d.
Brick-on-edge coping in flettons finished fair and pointing as work proceeds ...	Ft. run	2 5	3 3
Add for every increase by 10s. per 1,000 in cost of superior bricks	"	1	1½
Add for two courses of roofing tiles under and cement weather fillets on both sides	"	3 7	4 4
Cills :			
Two courses of roofing tiles laid breaking joint in cement mortar, set weathering and pointing ...	Ft. run	3 7	
Arches :			
Extra over fletton brickwork for brick-on-end flat arch 4½ in. on soffit and 9 in. high in facings p.c. 350s. per 1,000 and pointing	Ft. run	3 7	
Extra over fletton brickwork for fair axed arch in stock facings p.c. 350s. per 1,000 and pointing (cuttings measured separately)	Ft. sup.	9 3	

CURTAIN WALLING

Curtain walling of hollow, extruded, aluminium alloy mullion and transom units fixed together to form a grid to conventional steel and concrete framework, including glazing complete and a reasonably priced infilling panel and subject to the number of vents, etc., required, a fair average price is from 22/- to 27/6 per ft. sup.

PAVIOR

	Yd. super rates			
	½ in.	*¾ in.*	*1 in.*	*1¼ in.*
	s. d.	s. d.	s. d.	s. d.
Cement screed (1 : 3) to receive pavings	4 5	5 3	6 1	6 11

Add to above for :		d.
Trowelling smooth	Yd. sup.	7
Narrow widths or small quantities—add 25 per cent. to plain surfaces : Laying to falls	"	4

	Yd. super rates			
	1 in.	*1¼ in.*	*1½ in.*	*2 in.*
	s. d.	s. d.	s. d.	s. d.
Granolithic paving (1 : 2½) laid on concrete	8 9	9 11	12 0	13 2

Add to above for :		s. d.
Narrow widths or small quantities—add 25 per cent to plain surfaces.		
Surface hardening with three coats of silicate of soda	Yd. sup.	1 5
Carborundum finish with 2 lb. per yd. sup. trowelled in	"	3 0
¾ in. skirting 5 in. high covered at bottom and fair top edge	Ft. run	2 9
Mitres and ends—7d. each.		
Composition flooring ½ in. thick	Yd. sup.	18 0
Terrazzo paving ⅜ in. thick	"	45 0
Rubber flooring ¼ in. thick	"	65 0

ASPHALTER

		Mastic BSS 988	*Natural rock BSS 1162*
Asphalt roofing :		s. d.	s. d.
¾ in. flat to falls in two thicknesses on felt underlay on prepared screed	Yd. sup.	14 3	20 0
do. in small quantities or narrow widths	Ft. sup.	2 0	2 9
6 in. high skirting with angle fillet and splayed edge at top	Ft. run	2 7	3 0
External angles on do.	No.	7	7
Internal angles on do.	"	7	7

		Mastic BSS 1097	*Natural rock BSS 1418*
Asphalt Damp-proof Course and Tanking :		s. d.	s. d.
Vertical damp-proof course in 2 thicknesses	Yd. sup.	21 0	27 0
do. in narrow widths	Ft. sup.	2 6	3 4
¾ in. Horizontal damp-proof course in two thicknesses	Yd. sup.	14 4	19 9
do. in narrow widths	Ft. sup.	1 10	2 6
Vertical tanking in three thicknesses ...	Yd. sup.	25 0	31 4
1½ in. Horizontal do. in three thicknesses	"	19 3	29 2
Labour double angle fillet	Ft. run	1 4	1 4

DRAINLAYER

	Per yd. run Depth of trench				
	2 ft.	3 ft.	4 ft.	5 ft.	10 ft.
	s. d.	s. d.	s. d.	s. d.	s. d.
Excavate trench, part return fill and ram and remove surplus, inc. planking and strutting. (In firm soil—if in clay or chalk adjust in accordance with previous excavation rates)	8 3	21 7	28 10	36 0	106 3

	Per yd. run		
	4 in.	6 in.	9 in.
	s. d.	s. d.	s. d.
Concrete (1 : 6–1½ in agg.) 12 in. wider than external diameter of pipe in 4 in. bed and benching up on both sides	8 0	8 10	11 3
do. but 6 in. bed and do.	9 7	11 3	13 7
do. but 4 in. bed and surround to pipe	11 7	14 5	19 0
do. but 6 in. bed and surround to pipe	15 7	18 10	23 9
	Per ft. run		
Salt glazed drain pipes laid and jointed in trench (Minimum two-ton loads) :	4 in.	6 in.	9 in.
	s. d.	s. d.	s. d.
'Seconds'	2 8½	3 10	6 1
'Best'	2 11	4 2½	6 9½
'Best Tested'	3 7¼	5 1¾	8 7
'British Standard'	3 11¼	4 5½	7 3½
'British Standard Tested'	3 8¾	5 5	8 11
Extra for bends 'Best' quality	4 0	5 10	16 11
Extra for junctions 'Best' quality	7 0	9 11	21 4
Cast-iron drain pipes to BSS 437 laid and jointed with molten lead in trench	15 3	22 6	—
Extra for :			
Short lengths	4 0	5 1	—
Bends and extra joints	22 6	59 0	—
Junctions and do.	46 3	102 8	—
Cast-iron gulley trap with 9½ in. x 6½ in. grating and joint	45 2	—	—
Cast-iron rainwater shoe with vertical inlet, inspection door and bedding and joints ...	70 3	—	—
Cast-iron inspection fittings with single branch fitting one side	164 0	—	—

	Per ft. run		
	3 in.	4 in.	6 in.
	s. d.	s. d.	s. d.
Pitch fibre pipes to BS 2760 and laying and jointing in trench (in loads of £60 to £250)	2 6	3 3	6 2

		4 in.	6 in.
Manhole items :		s. d.	s. d.
Brown glazed stoneware straight, half-round channels	Each	5 4	7 8
do. ordinary channel bends... ...	,,	11 10	16 11
Three-quarter section curved channel bends with splayed ends	,,	15 0	21 6
Cast-iron heavy galvanised steps	Each		13 0
Bedding and sealing medium weight manhole covers and frames (cost of cover to add)...	,,		10 0
do. heavy road covers and frames	,,		13 3

MASON

		Per ft. cube		
		Bath	Portland	York
Stone and all labours fixed in :		s. d.	s. d.	s. d.
Ashlar average 6¾ in. on bed ...	Ft. sup.	32 8	37 5	39 0
Moulded string course 9 in. x 6 in.	Ft. run	28 4	31 0	33 10
Moulded cornice 18 in. x 9 in. ...	,,	71 6	77 6	82 6
Weathered and throated cills :				
9 in. x 3 in.	,,	17 10	19 3	20 7
12 in. x 6 in.	,,	35 9	38 0	40 2
Weathered and throated copings:				
12 in. x 3 in.	,,	19 3	21 0	21 9
14 in. x 6 in.	,,	38 0	43 0	44 6
Plinth rubbed top and face size :				
4½ in. x 9 in.	,,	19 6	21 9	21 0
Plain steps, size 12 in. x 6 in. ...	,,	—	—	35 9
,, ,, ,, 14 in. x 2 in. ...	,,	—	—	16 9
Riser, size 2 in. x 4 in. ...	,,	—	—	8 0
2 in. Sawn paving edges squared in random sizes	Yd. sup.	—	—	98 0
Supplied only :				
Templates and cover stones coped edges	Ft. cube	—	—	33 6

ROOFER

	Yd. sup.
	s. d.
Bituminous built-up roofing in two layers of felt, the first layer 45 lb. and the second 55 lb. to BS 747, covered with limestone or granite chippings n.e. ¼ in. thick	10 0
All as above but in three layers, the first and second layers in felt 45 lb.	13 9

	Steel Tees at	
	2 ft. 0½ in. centres	4 ft. 0½ in. centres
2 in. compressed straw building slabs in standard sizes fixed complete with 18G steel tees with fixing clips to steel structure to form roof decking :	s. d.	s. d.
Areas of 50–100 yds. sup.	27 8	21 4
,, 101–250 ,, ...	26 10	20 9
,, 251–750 ,, ...	26 0	20 3
,, Over 750 ,, ...	25 2	19 4
If 16G steel tees are used—Add to above	1 5½	9

Welsh slating	Per square		
	16in.x8in.	18in.x10in.	20in.x10in.
	s. d.	s. d.	s. d.
Laid with 3 in. lap and 2 zinc nails each slate	382 0	411 0	509 0
Additional labours :			
Top edge cutting ... Ft. run	9	9	9
Square abutment do. ,,	9	9	9
Double course at eaves... ,,	1 3	1 3	1 3
Raking, cutting and waste ,,	11	11	11
1½ in. x ¾ in. slate battening for last ... ... Per sq.	36 9	33 0	29 3

Roof Tiling	Per square		
	Berkshire hand-made	Stafford machine made	Concrete Tiles
	s. d.	s. d.	s. d.
Roof tiling with 10½ in. x 6½ in. tiles laid to a 4 in. gauge, every fourth course fixed with two galvanised nails	264 0	253 0	163 3
1 in. x ¾ in. tile battening for last	39 6	39 6	39 6
Additional labours :			
Top edge cutting ... ... Ft. run	9	9	9
Square abutments do. ... ,,	9	9	9
Raking cutting to hips ... ,,	11	11	11
Eaves course ... ... ,,	11	11	11
Half-round ridge and hip tiles ... ,,	2 11	2 11	2 11

CARPENTER AND JOINER

	Ft. cube			
	Plates	Joists	Rafters & Partitions	Roof trusses
	s. d.	s. d.	s. d.	s. d.
Softwood carcassing, including all waste, nails, hoisting and fixing	17 1	19 10	22 10	27 4

	Per square		
	¾ in.	1 in.	1¼ in.
Boarding and Flooring : (Softwood) :	s. d.	s. d.	s. d.
Rough boarding to flats and roof... ...	126 9	162 3	197 7
Softwood plain edge flooring cleaned off	156 9	175 9	213 10
Tongued and grooved flooring cleaned off	170 9	197 7	239 10

		s. d.
Extra for 2 in. x 3 in. average firrings	Per sq.	81 7
Herringbone strutting to 2 in. x 8 in. joists	Ft. run	1 10
1 in. gutter boarding and bearers	Ft. sup.	3 9
Raking, cutting and waste on 1 in. flooring	Ft. run	9
Composition Boards, etc. :		
⅛ in. hardboard to BS 1142 fixed to vertical battens	Yd. sup.	6 9
½ in. insulation board to BS 1142 do. do.	,,	6 11
1 in. woodwool slabs fixed to flat or sloping soffits	,,	9 7
2 in. compressed straw building slabs in standard sizes fixed to wood bearers to flat or sloping surfaces in quantities of 101 to 250 yds. super	,,	14 8
¼ in. flat asbestos sheeting fixed vertically	,,	11 0

Wood Block Flooring:

		s. d.
1 in. nominal West African mahogany flooring laid herringbone pattern in mastic	Yd. sup.	34 6
1 in. do. Agba	,,	34 6
1 in. do. Sapele	,,	36 3
1 in. do. Beech	,,	39 0
1 in. do. Rhodesian Teak	,,	52 0

Extra for preparing and polishing 2/3 yd. sup.

	Sectional area 1		
	n.e. 4 in.	4–6 in.	ex. 6 in.
Skirtings:	s. d.	s. d.	s. d.
Softwood skirting with rounded or moulded edge, planted on including all labours in short lengths, mitres, etc., per in. in sectional area	3¾	3¼	2¾

Labours over 6 in.—Mitres=1 ft. run. Return mould ends=1 ft. 6 in. run
Sawn grounds nailed 3¼d. ft. run. If plugged+7d. ft. run.

	Ft. super	
	Large sqrs.	Small sqrs.
Sashes and Frames: (Softwood):	s. d.	s. d.
1½ in. rebated, rounded or moulded fixed	3 7	5 9
2 in. ,, ,, ,, ,, ...	4 0	6 2
Add for hanging on butts ... ... each	2 9	2 9
Double-hung sashes and frames with oak cills, purpose-made and not less than 1 doz. in each order:		
Quantities under 1 doz.—add up to ½ according to quantity. (Average size 4 ft. x 5 ft.)	10 8	14 6

Extra cost of boxed mullions 1s. ft. sup.
Extra for hanging sashes with lines, weights and axle pulleys 47s. each.

	Ft. super			
	1¼ in.	1½ in.	1¾ in.	2 in.
Doors: (All-purpose-made) (Softwood)	s. d.	s. d.	s. d.	s. d.
Softwood skeleton framed with hardboard flush both sides (standard internal pattern)	3 7	4 0	4 5	4 10
Framed, ledged and braced	—	5 1	6 2	6 4
Four panel square framed both sides	4 10	5 7	6 7	6 10
Add for each side moulded on last...	6	6	6	6
do. flush framed	1 0	1 1	1 3	1 3
do. bead and butt do.	1 3	1 4	1 6	1 6
do. bolection moulded do.	1 6	1 6	1 6	1 6
do. raised and fielded do.	—	2 4	2 4	2 4

Rebated and beaded meeting stile 4d. ft. run.
Dwarf doors add up to 50 per cent according to size.

	Sectional area		
	n.e. 6in.	6-12 in.	ex. 12in.
Window and Door Linings and Frames:	s. d.	s. d.	s. d.
Softwood linings per inch of sectional area	4½	4	3½
Add for cross-tongueing	—	1	¾
Frames, including rebating and once moulded or equivalent of two run labours, per sectional inch	4	3½	3

Transomes and cills plus 10 per cent on frames.
Additional run labours plus 1½d. per ft. run.

	Per ft. run			
	Sectional area			
	1 in.	2 in.	4 in.	6 in.
Softwood Bearers, Fillets and Mouldings, etc.:	s. d.	s. d.	s. d.	s. d.
Wrot grounds, bearers, fillets, etc.	4½	7	11	1 3
Mouldings, picture rails, architraves, etc.	5	7½	11½	1 4
Framed legs and bearers or similar	9	11	1 4	1 10
Glazing beads, mitred and bradded	6	8½	—	—
Add for plugging	6	6	6	6
Add for brass cups and screws ...	2½	2½	2½	2½

	Thickness			
	¾ in.	1 in.	1¼ in.	1½ in.
Shelving (Softwood):	s. d.	s. d.	s. d.	s. d.
Slat shelving 2 in. wide spaced 1 in. between ... ... Ft. sup.	2 0	2 3	2 8	3 1
9 in. shelving ... ... Ft. run	2 0	2 4	2 10	3 6
Shelving over 9 in. wide ... Ft. sup.	2 7	2 11	3 7	4 2

1 in. x 2 in. chamfered bearers in short lengths, plugged, each 2s. 3d.

	Ft. super	
	1 in. treads	1¼ in. treads
Staircases (Softwood):	s. d.	s. d.
Treads and risers with moulded nosings, glued, blocked and bracketed on carriages	6 3	7 0
Cross-tongued winders	8 3	9 4

		s. d.
Strings, framed	Ft. run	4 9
Housings for treads and risers	Each	3 0
1 in. x 1 in. sq. balusters framed each end on rake ...	,,	4 1
3½ in. x 3½ in. sq. framed newel	,,	5 2
Mahogany handrail, average 3 in. x 3 in.	Ft. run	8 10
,, ,, ramped	,,	26 0

FIXING ONLY IRONMONGERY

All to Softwood:	Each s. d.		Each s. d.
Barrel bolts	1 9	Rim locks	5 2
Flush bolts	6 3	Mortice locks	11 0
Sash fasteners	3 4	Overhead door springs...	14 6
Casement fasteners ...	2 3	Patent floor springs and oil	36 3
Cupboard locks	5 0		

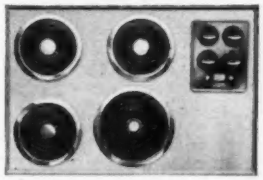
FOUNDER AND SMITH

		s. d.
Fabricated steelwork of basis section including hoisting and fixing at various levels:		
Rolled steel joists	per cwt.	90 0
Compound girders	,,	97 0
Stanchions	,,	102 3
Compound stanchions	,,	108 0
In roof work—trusses and purlins ... ... (Average prices, not for awkward work)	,,	122 0
Cleats, brackets, packing pieces, etc., in connections, including rivets and bolts	,,	147 6
Wrot iron framed cat ladders	,,	148 0 to 168 0

PLUMBER

		Per ft. run		
		3 in.	4 in.	5 in.
Cast iron rainwater goods: (Under 5 cwt. lots):		s. d.	s. d.	s. d.
Half-round gutter jointed in red lead and bolted and fixed with iron brackets		3 2	3 9	4 7
Extra for stop ends	each	2 5	3 0	3 11
do. angles or outlets	,,	5 10	6 2	7 3
O.G. gutter of ⅛ in. metal fixed as above		3 8	4 2	4 11
Extra for stop ends	each	2 9	3 4	4 4
do. angles or outlets	,,	6 7	6 9	8 1
		2 in.	3 in.	4 in.
Rainwater pipe jointed in red lead and tow fixed to brickwork with pipe nails and distance pieces: ⅛ in. metal		4 3	4 10	6 3
Extra for shoes	each	5 0	6 10	9 2
do. bends	,,	5 9	8 1	10 4
do. junctions	,,	7 9	11 0	14 1
Cast iron soil and waste pipes: (Under 5 cwt. lots):		2 in.	3 in.	4 in.
Soil, waste or ventilating pipes with caulked joints fixed to brickwork with pipe nails and distance pieces: 13/64 in. metal		6 2	7 3	9 6
Extra for bends	each	13 7	16 2	20 2
do. junctions	,,	16 10	23 3	29 2
do. oval access door to any fitting	,,	16 6	16 6	21 3
Extra cost for type 'E' holderbat fixing and cutting and pinning to brickwork	ft. run	1 6	1 7	1 7½

Planning down to detail . . .

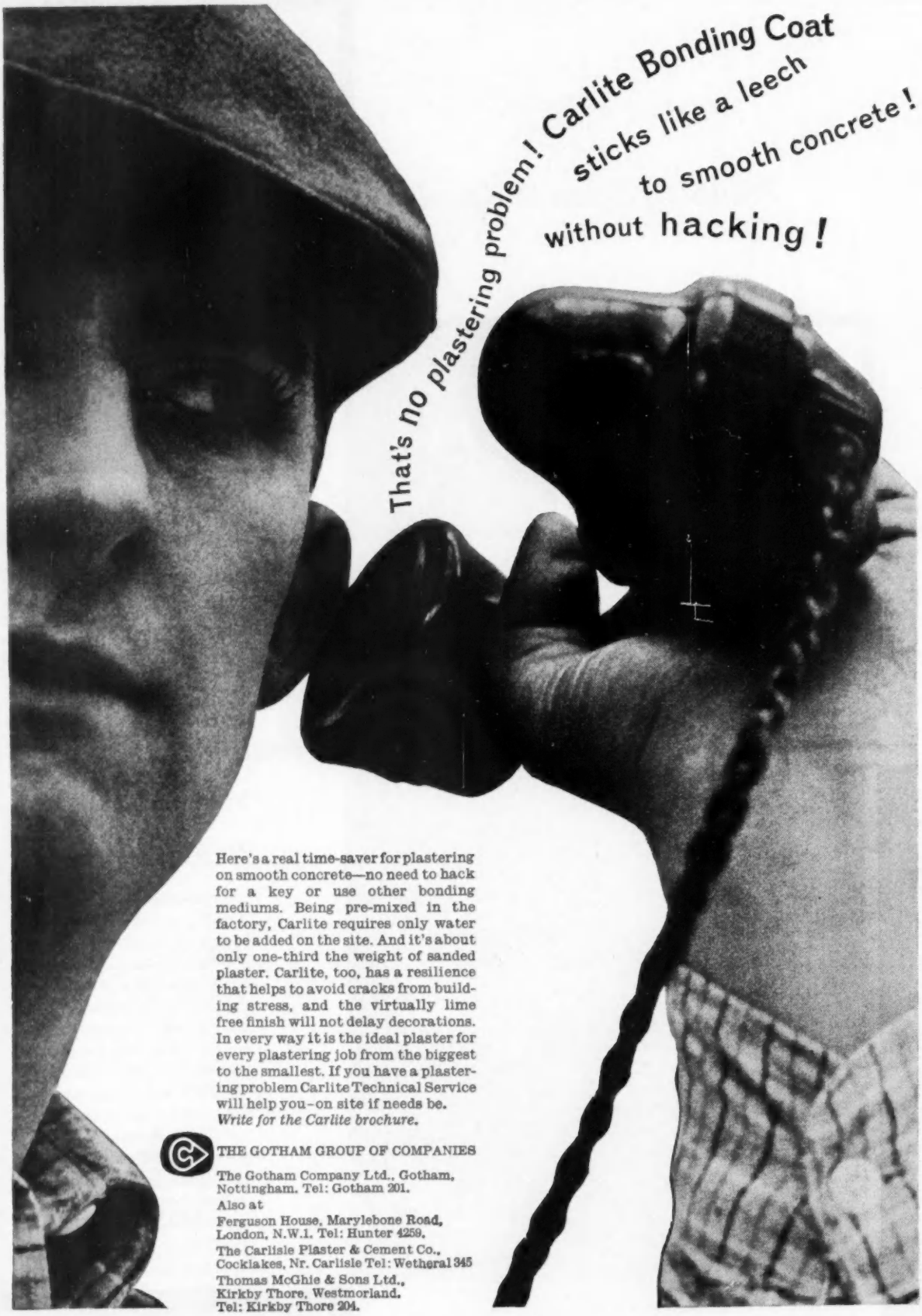


means getting round to Moffat

Engineered with professional devotion to detail, boasting feature after feature unheard of in other cookers, MOFFAT cookers are now available as Built-In Ovens and Surface Units in Satin Chrome or a wide range of colours. The Built-Ins offer all the famous MOFFAT features plus flexibility of planning and ease of installation. *Build in or build around.* Virtually all kitchen furniture manufacturers make kitchen units especially to accommodate MOFFAT 'Built-Ins'.

Mention MOFFAT by name to your kitchen-conscious clients. Send for full explanatory literature. Contact MOFFATS Limited at 35 Davies Street, London W.1.

MOFFAT



Here's a real time-saver for plastering on smooth concrete—no need to hack for a key or use other bonding mediums. Being pre-mixed in the factory, Carlite requires only water to be added on the site. And it's about only one-third the weight of sanded plaster. Carlite, too, has a resilience that helps to avoid cracks from building stress, and the virtually lime free finish will not delay decorations. In every way it is the ideal plaster for every plastering job from the biggest to the smallest. If you have a plastering problem Carlite Technical Service will help you—on site if needs be.
Write for the Carlite brochure.

THE GOTHAM GROUP OF COMPANIES

The Gotham Company Ltd., Gotham, Nottingham. Tel: Gotham 201.
Also at
Ferguson House, Marylebone Road, London, N.W.1. Tel: Hunter 4259.
The Carlisle Plaster & Cement Co., Cocklakes, Nr. Carlisle Tel: Wetheral 345
Thomas McGhie & Sons Ltd., Kirkby Thore, Westmorland. Tel: Kirkby Thore 204.

	Soakers	Flats	Gutters, valleys, etc.	Flashings	Stepped Flashings
External leadwork: (Over 1 ton):	s. d.	s. d.	s. d.	s. d.	s. d.
Milled lead and labour in per cwt.	141 4	166 11	179 11	186 5	199 5

Labours, etc.: Double welt	ft. run	1 0
Copper nailing: Open	,,	7
Close	,,	1 0
Soldered seam	,,	6 7

		2 in. x 10 lb.	3 in. x 15 lb.	4 in. x 19 lb.
Lead pipes: (Over 1 ton):		s. d.	s. d.	s. d.
Soil, waste and ventilating pipes, fixed to walls with plain lead tacks and brass screws	per ft.	10 11	14 4	18 9
Extra for: Lengths under 4 ft. ...	,,	3 0	3 6	4 6
Bends	No.	12 6	23 9	24 10
Wiped soldered joints	,,	20 0	29 7	33 7
,, branch joints	,,	24 4	35 0	39 3

	Per ft. run					
	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Lead pipes including running joints:	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Main in trench ...	3 4	5 0	7 5	9 3	11 9	16 5
do. fixed with hooks	4 0	5 10	8 8	10 8	13 4	18 3
Service and do. ...	3 5	5 0	6 11	8 3	10 4	13 4
Waste and do. ...	2 8	3 11	5 7	6 7	8 4	10 11
Extra for lengths under 4 ft. ...	9	1 0	1 6	1 9	2 0	2 7
Soldered stop ends ... ... No.	2 6	3 0	3 9	4 6	5 2	6 8
do. joints to fittings ... ,,	6 6	9 2	11 0	13 4	16 3	19 9
do. branch joints... ... ,,	7 2	10 1	12 2	14 10	17 11	21 8
Brasswork:						
Union with red lead joint to iron and soldered joint to lead ... ... ,,	12 0	14 10	18 6	22 9	27 10	40 6
Stop-cock and soldered joints... ... ,,	21 0	30 8	43 7	70 0	89 6	167 5
Bib-cock do. ,,	18 6	24 9	—	—	—	—
Ball-valve do. ,,	18 0	30 4	43 5	71 7	89 6	—
Steel tubing:						
Galvanised tubing Class C laid in trench	2 4	2 6	2 10	4 1	5 6	6 6
do. Class B fixed to walls, etc. ...	2 7	3 0	3 4	4 5	6 2	7 1
Extra for bends No.	5 0	5 9	7 7	9 10	11 8	17 2
Tees ,,	5 8	6 9	8 2	10 10	12 10	18 8
Red lead joints ,,	3 6	3 9	4 1	4 7	5 1	5 7
Copper tubes and fittings: gauge	19	19	18	18	18	17
Tubes and fixing to walls	2 7	3 4	4 6	5 5	6 4	9 2
Extra for lengths under 4 ft. ...	7	9	11	1 0	1 3	1 6
Brass capillary type fittings:						
Couplings—copper to copper ...	3 8	4 4	6 9	8 9	11 2	15 3
Bends— do. ...	5 10	7 1	8 11	11 7	17 2	32 3
Tees— do. ...	8 7	9 11	14 2	19 2	26 3	36 4
Stop cocks	23 7	33 1	60 2	101 2	152 3	250 4
Tank connectors ...	4 9	5 4	8 1	10 2	14 3	18 4

PLASTERER

		s. d.
Expanded metal lathing ⅜ in. mesh 24 gauge ... ... (not including hangers for suspended work)	Yd. sup.	8 6
Lime Plastering: Render, float and set	,,	9 11
Sirapite Plastering: Render in Portland Cement, Lime and Sand and set in Sirapite	,,	7 9
Sirapite Plastering: Render and set in Sirapite plaster to manufacturer's instructions	,,	8 0
Paristone Plastering: do. do.	,,	8 3
Carlite Plastering do. do.	,,	8 10
Portland Cement: Plain face trowelled smooth ...	,,	9 11
Keenes: Render in cement and lime and set in Keenes	Yd. sup.	10 6
Extra for dubbing out ¼ in. thick 1/11, ½ in. thick 3/11		
⅜ in. Plasterboard and setting coat ...	,,	8 11
Narrow widths: Up to 3 in. wide add 300 per cent. Do. 3-6 in. do. 200 per cent. Do. 6-12 in., add 75 per cent.		
Labours: Arris 5½d. Fair edge 6½d. Quirk 10d.		
Plaster Moulded Cornices: 6 in. girth and under ...	Ft. run	3 1
Over 6 in. girth, add 3½d. per in.		
Tyrolean Rendering on and including Portland Cement and Sand backing	yd. sup.	12 8
Wall Tiling: 6 in. x 6 in. white glazed ¼ in. thick ...	,,	45 0
Extra for rounded angle or birdsbeak	Ft. run	4
do. rounded edge tile	,,	5

GLAZIER

	Wood sashes with beads or putty
	s. d.
Clear sheet glass ordinary quality:	
18 oz.	1 5
24 oz.	1 7½
26 oz.	1 10½
32 oz.	2 3½
Obscured glass:	
⅛ in. Figured rolled White group 1	1 10½
,, ,, ,, group 2	2 2½
,, ,, Standard tints	2 6½
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and luminating group 3	2 4
¼ in. Wired Cast	2 7½
¼ in. Georgian Wired Cast	2 8
¼ in. Polished Plate Glass, G.G. Quality:	
In plates not exceeding 2 ft. sup.	6 8½
,, ,, ,, 5 ft. sup.	7 8½
,, ,, ,, 45 ft. sup.	9 8½
,, ,, ,, 100 ft. sup.	9 7½
Extra on all above:	
For glazing with screw beads ft. sup.	5½
(Excepting polished plate over 12 ft. super on which no extra is charged)	
For glazing with metal sashes with putty	1
Glazing bedded in washleather ... ... Ft. run	8½

PAINTER

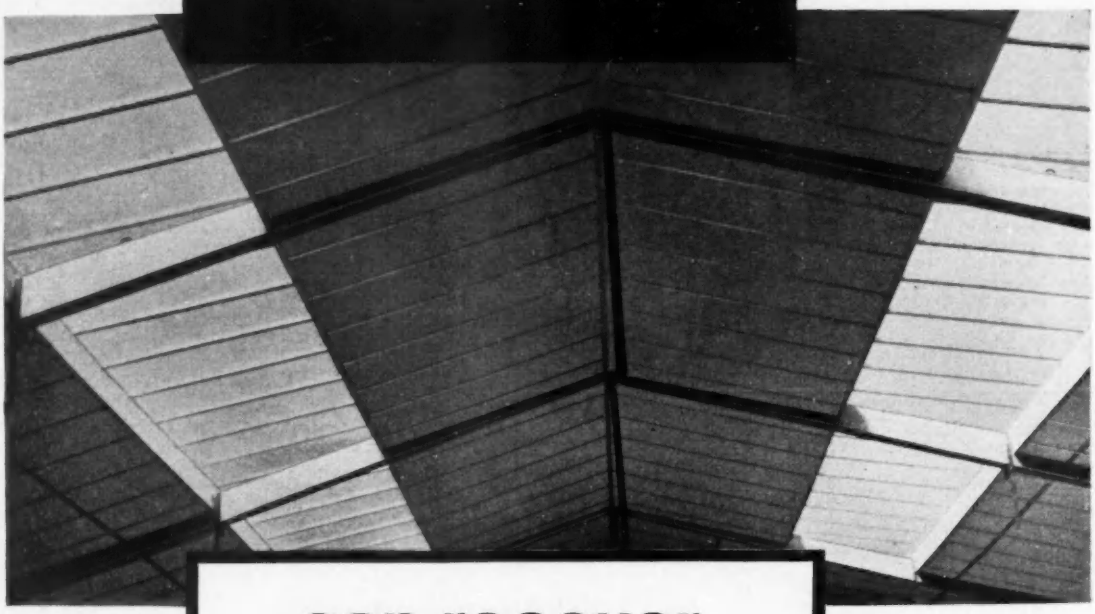
		s. d.
Limewhiting: Prepare and two coats on brick ...	Yd. sup.	1 2
Whitening: Prepare and two coats on plaster ...	,,	1 5
Washable distemper: Prepare and two coats on plaster	,,	1 11
Emulsion paints: Prepare and two coats on plaster ...	,,	3 1

Painting with oil colours:	Yd. super 1 coat	2 coats	3 coats
	s. d.	s. d.	s. d.
Prepare and paint on plaster	2 3	4 3	6 4
On Steel:			
Plain surfaces	1 10	3 7	5 5
Roof trusses...	2 4	4 7	6 11
Metal casements divided into squares ...	3 4	6 8	10 0
do. divided into large squares ...	2 7	5 0	7 6
Opening edges ... ... Each	8	1 3	1 10
Small pipe ... ... Yd. run	6	1 0	1 5
Rainwater pipe ... ... ,,	1 0	1 11	2 9
Gutter ... ... ,,	1 4	2 6	3 8

	Knot prime and stop	Add for each extra coat
On Woodwork:	s. d.	s. d.
General surfaces ... ... Yd. sup.	2 10	2 3
On work not exceeding 3 in. girth ... Yd. run	4½	3½
Add to last for every additional 3 in. in girth	3½	2½
Sash squares on one side ... ... Doz.	5 6	4 6
Large ,, ,, ,, ... ,,	8 6	8 0
Opening edges ... ... No.	9	8

		s. d.
Oiling Hardwood: Two coats with linseed oil... ...	Yd. sup.	1 4
Creosote: Two coats on woodwork	,,	1 7
Polishing—New Work:		
Staining and wax polishing hardwood	Ft. sup.	1 1
Staining, bodying in and full french polishing on hardwood	,,	2 6
Old Work previously polished:		
Preparing old work and repolishing	,,	1 2
Stripping, preparing and repolishing	,,	3 1
Papering:		
Preparing, sizing and hanging lining paper	per piece	10 7
do. do. Wallpaper, p.c. 10s.	,,	19 8

Atlas Insulation board



Atlas Insulation Board in use in a clothing factory, Leighton Buzzard.

can recover its cost within three years

Heating costs go down smartly in plants and offices insulated by Atlas Asbestos Insulation Board. The low thermal conductivity of Atlas Insulation Board means that buildings can be kept pleasantly warm with considerably less fuel. In fact, it is estimated that insulation costs can be recovered within three years. Lightweight, easy-to-use Atlas Asbestos Insulation Board is non-inflammable, inorganic, and resistant to acidic fumes. When used in conjunction with the Atlas Metal Fixing System, it provides a method of reducing condensation. Specify Atlas Asbestos Insulation Board for better insulation at lower cost. For descriptive literature, write or telephone:

BARBOUR INDEX FILE NO. 108

THE Atlas Asbestos CEMENT COMPANY LIMITED
A Subsidiary of The Atlas Stone Co. Ltd.

ARTILLERY HOUSE
ARTILLERY ROW
LONDON SW1
Telephone: Abbey 3081
Telegrams: Atlastonco Sowest
Works at:
MELDRETH, Nr. Royston, Herts.
Also at:
GREENHITHE, STROOD, CAMBRIDGE, SHORNE, RYE (Sussex), GT. YARMOUTH

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	,,	1	3	8
Washed Sand	,,	1	6	9
¾ in. Shingle	,,	1	4	3
¾ in. Broken Brick	,,	1	0	9
Pan Breeze	,,	1	1	6
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

		£	s.	d.
Best British Portland Cement. Standard Specification delivered Charing Cross area.				
6-ton loads and upwards, site	per ton	5	15	3
1 to 6 tons, site	,,	6	7	3
Rapid-Hardening Cement in 6-ton loads and upwards to site	,,	6	5	9
1 to 6 tons do. site	,,	6	17	9
Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.				
Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.				
Red, Buff or Khaki Colorcrete in 6-ton lots	,,	8	15	3
Other colours according to colour.				
In 4-ton lots from 313s. 3d. to 711s. 3d. per ton.				
White Portland Cement	,,	14	0	9
Under 1 ton	per cwt.		17	1
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	7	7	9
Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.				
Cullamix Tyrolean Finish, £11 13s.3d. to £14 8s.3d. (1-ton loads and upwards).				
Ciment Fondu and Lightning Brands High Aluminous cement, 6-ton lots and up	,,	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	,,	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	,,	7	12	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	6	0

BRICKS

Full Loads		£	s.	d.
First Hard Stocks	per 1,000	16	19	6
Second Hard Stocks	,,	14	18	6
Mild Stocks (Kiln Burnt)	,,	11	5	0
Mild Stocks	,,	11	0	0
All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.				
2½ in. Nominal Fletton Bricks to sites in W.C. district :				
Commons	,,	6	12	0
Cellular Commons	,,	6	12	0
Keyed do.	,,	6	14	0
Rustics	,,	8	12	0
Cellular Rustics	,,	8	12	0
Single Bullnose Commons	,,	8	14	6
Sandfaced	,,	9	12	0
Tuscans	,,	10	7	0
Saxons	,,	10	15	0
Golden Buffs	,,	11	2	0
Dapple Light Facings	,,	11	9	6
Heather Facings	,,	11	5	0
Best Blue Pressed Staffs (London sites)	,,	33	4	9
do. Bullnose (London sites)	,,	34	3	9
Blue Wire Cuts (London sites)	,,	29	9	6
Midhurst Lime Bricks (London sites)	,,	11	13	0
Uxbridge Whites (London sites)	,,	11	8	6
Special Purpose Sandlime Bricks (London sites)	,,	9	2	0
Best Stourbridge Fire Bricks :				
2½ in. (London stations)	,,	32	14	0
2½ in. (London sites)	,,	33	2	9
3 in. (London stations)	per 1,000	39	4	6
3 in. (London sites)	,,	39	15	0
2⅞ in. Moler Flue Bricks (London sites)	,,	31	0	0
2½ in. Machine-made Sandfaced Red Facings (London sites)	,,	18	19	0
2½ in. Machine-made Multi Red Facings (London sites)	,,	19	4	0
2½ in. Hand-made Sandfaced Red Facings (London sites)	,,	20	17	6
2½ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	,,	20	17	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	,,	21	5	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	,,	21	5	0
Rubber Bricks for gauged arches (London sites)	,,	52	5	0
2½ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	,,	16	15	0
2½ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	,,	18	2	6
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	,,	64	0	0
Headers	,,	63	0	0
Quoins, Bullnose and 4½ in. Flats	,,	80	0	0
Double Stretchers	,,	85	0	0
Double Headers	,,	77	10	0
One side and two ends	,,	87	0	0
Two sides and one end	,,	89	10	0
Splays and Squints	,,	83	0	0
Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d. extra over White. All above prices plus 47½% for Best quality and plus 47½% less 10% for Second quality.				

PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District).

		£	s.	d.
HOLLOW CLAY PARTITION BLOCKS (Keyed)				
Minimum lorry loads				
*2½ in. 140 yds.	per yd. sup.		4	7
BUILDING BLOCKS (Keyed)				
*3 in. (6 cavity) 110 yds.	,,		5	9
*4 in. (6 cavity) 90 yds.	,,		7	3
6 in. (8¾ in. × 5¾ in.) 1,250 blocks	per 1,000	28	9	0
* Half blocks at no extra charge.				
CLINKER CONCRETE				
2 in. 100 yds.	per yd. sup.		3	11
2½ in. 85 yds.	,,		4	6
3 in. 75 yds.	,,		5	6
4 in. 55 yds.	,,		6	11
CRANHAM TERRA COTTA				
2 in.	,,		7	5
2½ in.	,,		8	4
3 in. Load bearing quality	,,		9	6
4 in. do. do	,,		11	6
MOLER PARTITION BLOCKS				
2 in. 150 yds.	,,		12	9
2½ in. 120 yds.	,,		13	9
3 in. 100 yds.	,,		14	9
4 in. 90 yds.	,,		17	0
LIGHTWEIGHT CONCRETE BUILDING AND PARTITION BLOCKS OF VARIOUS SOURCES OF MANUFACTURE				
2 in. 100 yds.	per yd. sup.		5	4
2½ in. 80 yds.	,,		6	5
3 in. 65 yds.	,,		7	5
4 in. 50 yds.	,,		9	4
4½ in. 44 yds.	,,		10	2
6 in. 33 yds.	,,		14	5
THERMALITE-YTONG PARTITION BLOCKS				
2½ in. 144 yds.	,,		7	0
THERMALITE-YTONG LOAD-BEARING INSULATING BLOCKS				
3 in. 120 yds.	per yd. sup.		8	5
4 in. 90 yds.	,,		11	0
5 in. 72 yds.	,,		13	9
6 in. 60 yds.	,,		16	6
8½ in. 42 yds.	,,	1	3	8
FLOOR BLOCKS AND FILLER TILES				
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads :				
3 in.	per 1,000	35	14	0
4 in.	,,	38	9	0
5 in.	,,	46	1	0
6 in.	,,	52	12	0
7 in.	,,	64	12	0
8 in.	,,	75	9	0
9 in.	,,	83	2	0
10 in.	,,	92	0	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples :				
12 in. × 3 in. × ⅝ in.	,,	43	13	0
12 in. × 4 in. × ⅝ in.	,,	75	7	0
10 in. × 5 in. × ⅝ in.	,,	75	7	0

DIVIDING SPACE

!

YOU SHOULD KNOW ABOUT *Paramount* DRY PARTITION

In panel form, a ready-made double-sided plastered wall.
Sturdy, lightweight, fire-resistant.
Dry, for immediate decoration or as a base for plaster,
it's a quick-to-fix favourite in houses, factories or offices.

THE BRITISH PLASTER BOARD (MANUFACTURING) LTD
FERGUSON HOUSE 15-17 MARYLEBONE ROAD LONDON N.W.1.
TELEPHONE HUNTER 4021

BLUE HAWK
PRODUCTS

STONEWARE DRAIN PIPES, etc.

Glazed Stoneware Standard List (November, 1956).

		4 in.	6 in.	9 in.
Pipes, 2 ft. lengths	per ft.	1/8	2/6	4/6
Bends	each	5/–	7/6	20/3
Junctions	,,	8/4	12/6	27/–
Gullies with 4 in. outlets	,,	12/6	13/9	22/6

The following are the percentages to be added to the Standard List (November, 1956) prices delivered London Area.

Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
	−5%	+15%	+20%
Best Quality ...			
BSS Best Quality...	+10 %− 5%	+10 %+15%	+10 %+20 %
Tested Quality ...	+37½%− 5%	+37½%+15%	+37½%+20 %
BSS Tested Quality	+47½%− 5%	+47½%+15%	+47½%+20 %

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	10	6
4 in. do. do.	,,	16	16	0
6 in. do. do.	,,	34	10	0
9 in. do. do.	,,	64	19	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup.	do. do. ,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup.	do. do. ,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	,,		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	10
Beer Stone. Delivered London area	,,		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
12 in × 3 in. Weathered and twice throated coping	,,	3	3	3
14 in. × 6 in. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	35	16	6
Hand-made Pantiles Berkshire district	64	10	0
Hand-made Double Roman Bridgwater district	78	2	9
Hand-made 10½ × 6½ tiles Berkshire district	18	0	0
Machine-made 10½ × 6½ Staffordshire district	17	0	0
Hand-made Hip and Valley tiles per doz.	1	13	0
Machine-made Hip and Valley tiles do.	1	12	0
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	160	4	0
22 × 12	126	15	0
22 × 11	114	15	0
20 × 12	107	5	0
20 × 10	105	0	0
18 × 10	71	5	0
18 × 9	62	14	0
16 × 10	54	15	0
16 × 8	42	18	0

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

			£	s.	d.
Softwood	Ex Wharf	per			
Joinery quality		standard	£115 to £140		
Carcassing quality	do.	,,	£94 — £98		
1 in. Tongued and Grooved Flooring	do.	,,	£112	0	0
Hardwood			£	s.	d.
Mahogany—African S.E.	do.	per ft. cube	1	10	0
do. Honduras S.E.	do.	,,	3	5	0
Oak European S.E.	do.	,,	2	10	0
do. Japanese S.E.	do.	,,	3	0	0
do. English Logs sawn ...	do.	,,	2	0	0
Teak 8 in. average S.E. ...	do.	,,	3	17	6
Walnut African Logs sawn ...	do.	,,	1	2	6
Plywood		per			
6 mm. (¼ in.) Birch Plywood B/BB		100 sq. ft.	4	6	9
6 mm. Israeli Gaboon do. B/BB exterior grade WBP (AX100)		,,	4	5	3
18 mm. Birch Blockboard		,,	9	9	6
¾ in. Douglas Fir Plywood 96 in. × 48 in. Exterior grade WPB (AX100) solid two sides		,,	9	6	9

DOORS (in Lots I-II)

Delivered London area.

		£	s.	d.
1½ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	5	0
1½ in. Plywood Faced Flush Doors to BS459, Part 2A				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	12	3
2 ft. 0 in. × 6 ft. 6 in.	,,	1	12	3
2 ft. 3 in. × 6 ft. 6 in.	,,	1	13	9
2 ft. 6 in. × 6 ft. 6 in.	,,	1	15	3
2 ft. 9 in. × 6 ft. 6 in.	,,	1	18	0
1½ in. Hardboard Faced Flush Doors				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	5	6
2 ft. 0 in. × 6 ft. 6 in.	,,	1	6	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	6	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	8	6
2 ft. 9 in. × 6 ft. 6 in.	,,	1	9	6

SUNDRIES

Delivered London area.

		£	s.	d.
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (67 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
Quantities under 1 ton add 1d. per ½ in. of thickness				
½ in. imported or home produced insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
⅛ in. Hardboard do.	,,	1	17	6
3/16 in. do. do.	,,	2	4	6
2 in. Compressed Straw Slabs, roofing quality. 6 ft., 8 ft., 9 ft., 10 ft., and 12 ft. × 4 ft.				
50–100 yds.	per yd. sup.		11	4
101–250 yds.	,,		10	10
251–750 yds.	,,		10	1
Over 750 yds.	,,		9	4
2 in. do. for partitions 4d. per yd. cheaper.				
1/16 in. Asbestos Flat Building Sheets...	,,		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	3	9
do. pearl	,,	5	3	9
Croid Glue	28 lb.	2	6	0
Impact Adhesive	per gall.	2	12	0
Cut Nails 3 in. (1-ton lots)	per ton	84	10	0
do. 4 in. and up (1-ton lots)	,,	81	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	3	19	2
do. 4 in. and up (4-cwt. lots)	,,	3	16	6

METALS

STEEL JOISTS, ETC.

		£	s.	d.
Basis Joists—				
6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in. 12 in. × 6 in., plain cut to lengths delivered London area	per ton	47	15	0
Extra for sizes				
3 in. × 1½ in. 4 in. × 1¾ in.	,,	3	10	0
3 in. × 3 in.	,,	2	10	0
4 in. × 3 in.	,,	2	5	0
10 in. × 4½ in.	,,	1	10	0
5 in. × 2½ in. 5 in. × 3 in.	,,	1	15	0
4¾ in. × 1¾ in.	,,	3	5	0
5 in. × 4½ in. 7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in. 24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in. 7 in. × 4 in. 8 in. × 4 in. } 9 in. × 4 in. 10 in. × 5 in.	,,	1	5	0
12 in. × 5 in. 22 in. × 7 in.	,,	1	0	0

METALS—*continued*

		£	s.	d.
9 in. × 7 in. / 10 in. × 8 in. / 12 in. × 8 in.				
14 in. × 5½ in. / 14 in. × 6 in. / 14 in. × 8 in.	per ton		10	0
15 in. × 5 in. / 15 in. × 6 in. / 16 in. × 6 in.				
16 in. × 8 in. / 18 in. × 6 in. / 18 in. × 7 in.				
18 in. × 8 in. / 20 in. × 6½ in. / 20 in. × 7½ in.	,,		10	0
Steel angles average price	,,	48	15	0
Steel tees average price	,,	49	15	0
Fabricated work delivered London—				
R.S. Joists cut and fitted...	,,	67	19	0
Compound girders...	,,	72	14	3
Stanchions	,,	78	9	9
Compound stanchions	,,	83	4	3
In Roof Work—Trusses and Purlins	,,	93	19	6
Average prices not for awkward work.				
Angle cleats and ⅝ in., ¾ in. and ⅞ in. bolts average price London area	per cwt.	5	10	0

Ferro-Concrete Bars and Fabric

Mild Steel Ferro-Concrete Bars British manufacture to BSS 785 ex. Mills. 1 in. diameter and upwards delivered nearest London station ...	per ton	40	10	0
do. do. ex. London Stock do. delivered London site	,,	49	10	0
Extras—				
¼ in. diam....	per ton extra	8	12	6
5/16 in. do.	,,	6	12	6
⅜ in. do.	,,	4	12	6
½ in. do.	,,	3	2	6
⅝ in. do.	,,	1	10	0
⅞ in. and ¾ in. diam.	,,		15	0
Steel wire mesh reinforcing fabric to BSS 1221A.				
Ref. No. 106 ... ... 7.88 lbs.	per sq. yd.		5	2
,, ,, 109 ... ... 4.71 ,, ...	,,		3	0⅝
,, ,, 113 ... ... 1.83 ,, ...	,,		1	8¾
,, ,, 122 ... ... 7.32 ,, ...	,,		4	10¼
,, ,, 125 ... ... 4.32 ,, ...	,,		2	10¼

Mild Steel Tubes

Tubes to BSS 1387. Fittings BSS 1740.

Basic List Prices

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes	per ft.	9¾	10	1/-	1/2½	1/9	2/3	2/8	2/9
Bends	each	1/7	1/9	2/-	2/6	3/8	5/5	6/2	10/7
Elbows, square	,,	1/8	1/10	2/2	2/6	3/-	4/4	5/2	8/6
do. round	,,	1/10	2/-	2/4	2/10	3/4	4/8	5/8	9/4
Tees	,,	2/-	2/2	2/6	3/2	3/8	5/-	6/2	10/2
Crosses... ...	,,	4/4	4/8	5/6	6/6	8/2	11/-	13/2	21/-
Sockets, Plain	,,	6	6	8	10	1/-	1/4	1/9	2/6
do. Diminished	,,	8	10	1/-	1/2	1/6	2/-	2/8	4/-
Backnuts ...	,,	4	4	6	7	10	1/-	1/4	2/2

Malleable Fittings

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Elbows, round	each	8½	8½	9½	1/2½	1/8½	2/7½	3/6	5/-
Tees	,,	9½	9½	1/-	1/4¾	2/-	2/9½	4/-	5/6
Crosses... ...	,,	1/2½	1/2½	1/4¾	2/-	2/9½	3/7½	5/2½	7/2½
Sockets... ...	,,	5¾	5¾	7	9¼	1/-	1/7½	2/2½	3/1¼
Backnuts ...	,,	3	3	3¼	4¼	5¾	7¾	10¼	1/5¼

Discounts from List prices as follows :—

Galvanised Tube—

	Under 1 ton	Over 1 ton	W.I. Fittings	Malleable Fittings
Light	−38¾%	−40½%	Light −25½%	Malleable List
Medium	−34¾%	−36½%	Heavy −21¼%	−14% + 40%
Heavy	−27 %	−28¾%		

Black—

Light	−49 %	−50¾%	Light −31½%	Malleable List
Medium	−45 %	−46¾%	Heavy −27¾%	−14%
Heavy	−37¼%	−39 %		

C.I. Half-Round Gutters

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/2½	3/9	1/1
3½ in.	4/7	4/1	1/1
4 in.	5/11	4/7	1/7
4½ in.	6/6	5/1	1/11
5 in.	7/3	5/6	2/3

C.I.O.G. Gutters

Per yd. in 6-ft. lengths :	Gutters	Nozzles	Stop Ends
3 in.	5/5	4/11	1/3
3½ in.	6/-½	4/11	1/7
4 in.	6/8½	5/1	1/11
4½ in.	7/3	5/10	2/3
5 in.	7/11	6/8	2/7

C.I. Rain-Water Pipes

	Pipes	Bends	Branches
2 in.	8/11½	4/7	6/7
2½ in.	8/11½	5/1	8/10
3 in.	10/1	6/5	9/7
3½ in.	11/6	7/7	11/6
4 in.	13/3½	9/2	13/7

L.C.C. Coated Soil Pipes

2 in.	10/2½	7/10	9/7
2½ in.	10/9	8/9	11/11
3 in.	12/1	9/7	14/2
3½ in.	13/6	11/11	16/6
4 in.	15/4½	13/4	19/5

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 32½% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

		£	s.	d.
4 in. diameter in 9 ft. lengths	per yd. run	1	11	1
6 in. do. do.	,,	2	5	6
4 in. diameter bends	each	1	0	6
6 in. do. do.	,,	2	14	9
4 in. diameter branches	,,	1	16	6
6 in. do. do.	,,	4	7	6

Above prices for any quantity but under 5 cwt. carriage extra.

Pitch Fibre Drain Pipes

2 in. diameter in 5 ft., 5 ft. 6 in. or 8 ft. lengths including couplings	per ft. run	1	6½
3 in. do.	,,	1	10½
4 in. do.	,,	2	6
5 in. do.	,,	4	1¾
6 in. do.	,,	5	0½
4 in. diameter short radius ¼ bends	each	17	9
4 in. do. do. ⅛ bends	,,	12	11
2 in. diameter 6 ft. radius bends (5 ft. lengths)	,,	16	2
3 in. do. do. do.	,,	19	8
4 in. do. do. do.	,,	1 7	4
5 in. do. do. do.	,,	2 4	0
6 in. do. do. do.	,,	2 14	6

Above prices for loads of £60 and over.
Loads £25 to £59 19s. 11d. Plus 10%
Loads under £25 ... Plus 15%

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.		2 in.	2½ in.	3 in.	4 in.
Pipes, 6 ft. lengths	per yd.	4/7	4/10½	5/11	7/10
Shoes	each	3/-	3/3	3/10	5/2
Single Branches	,,	4/8	5/6	6/7	9/2
Bends, square or obtuse ...	,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj. ...	,,	3/7	4/8	5/2	7/3
do. 6 in. do. ...	,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

		4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths ...	per yd.	4/4	4/9½	5/9	6/10½
Drop ends	each	3/6	4/-	4/9	5/5
Stop ends	,,	1/1	1/2	1/3	1/5
Angles	,,	3/7	4/1	5/-	5/10
Nozzles	,,	3/6	4/-	4/9	5/-
Union Clips	,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/-	3/3	3/7	5/2
Stop ends	,,	1/-	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/-	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £	s.	d.
Iron—Staffordshire Crown Merchant Quality	52	17	6
Mild Steel Bars	47	8	6
Mild Steel Hoops	49	0	0
	Ex Merchant's Stock per ton Two-ton lots £	s.	d.
Soft Sheets C.R. and C.A.—			
20 gauge	62	7	6
24 gauge	64	17	6
26 gauge	67	17	6
Galvanised Corrugated Sheets, 6-ft. to 9-ft.—			
20 gauge	70	4	0
24 gauge	73	14	0
26 gauge	78	19	0
Galvanised Flat Sheets C.R. and C.A.—			
20 gauge	71	14	0
24 gauge	75	4	0
26 gauge	80	9	0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£	s.	d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)... ...	per lb.		3	0½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,		2	11½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,		2	11½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)...	,,		2	11
Coiled strip, high purity, 22 SWG (12 in. wide)	,,		3	2
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1	14	1
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	19	10
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	13	1
Extruded section BS 1476 E1C simple moulding	per lb.		2	10½
Extruded section BS 1476 E1C 1 in. diam. round	,,		2	8
Extruded section BS 1476 HE19WP simple angle	,,		3	2
Extruded section BS 1476 HE19WP 1 in. diam. round	,,		3	1
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG ...	,,		4	8
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	,,		6	3

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	B.S.S. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron...	87/-	128/-	—	—	—	—
Toilet bib cocks for iron ...	109/-	158/5	—	—	—	—

TRADE MARK

* Easily applied
* Almost odourless
* Dries in 2-3 hours
* Colours intermixable

Bindenol Pigmented Wall Primer

For interior and exterior use

Suitable for redecorating over loosely adherent friable surfaces - water paint, distemper, old plaster, etc. Binds and seals porous walls and ceilings, providing a firm foundation for normal painting. One coat over old gloss paint permits the use of emulsion paint without excessive preparation or fear of flaking.

GOODLASS, WALL & CO. LIMITED, CORN EXCHANGE, LIVERPOOL 2 or 179/185 GT. PORTLAND STREET, LONDON W.1.

There's nothing as good as Vermiculite for

PLASTERS

* **Light weight** — substantial reduction in dead load; lighter to mix, to carry, to apply.
* **Fire resistant** — high fire ratings with steelwork, timber, prestressed and reinforced concrete.
* **Firm adhesion** — outstanding on all normal backgrounds, including concrete.
* **Thermal insulation** — two to three times the insulation value of sanded plasters.
* **Cracking resistance** — maximum resistance due to the resilience of the aggregate.

And it is much cheaper to batch and mix your own plasters on site

specify

VERMICULITE

FOR PLASTERS, ROOF SCREEDS, FLOOR SCREEDS AND LOOSE FILL

Send for full details —
The Association of Vermiculite Exfoliators, 59 Gresham Street, London, E.C.2. Telephone: METropolitan 9101

PLUMBERS' BRASS WORK, etc.—*continued*

All per dozen	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown stop cocks for iron	66/-	95/9	188/-	363/-	522/6	917/6
do. with two unions for lead	89/-	132/-	234/4	472/-	623/6	1,389/6
Double nut boiler screws ...	18/8	26/5	47/6	48/6	67/-	93/6
Heavy Croydon ball valves ...	77/-	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/-
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/-	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5
	1¼ × 6 lb.	1½ × 6 lb.		2 × 7 lb.		3 × 7 lb.
Lead P. trap with brass cleaning screws	68/6	85/6		137/-		233/9
Lead S. trap do. do.	82/9	102/9		168/3		302/3

Solder :			s.	d.
Plumbers' ...	1 cwt. lots	320/-	14 lb. lots per lb. 3	7
Tinmen's	,, ,,	404/-	,, ,, ,, 4	5
Blow pipe ...	,, ,,	407/-	,, ,, ,, 4	6

Copper Tubes and Sheets

Copper tubes BSS 659/1944 on the basic price of 29½d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
⅛ in. × 19 gauge	16¼	Total per lb.	45¼	Approx. per ft.	12¼
⅛ in. × 19 ,,	14¾	,, ,,	43⅝	,, ,,	17
1 in. × 18 ,,	12¼	,, ,,	42¼	,, ,,	26
1¼ in. × 18 ,,	12¼	,, ,,	41¼	,, ,,	31¼
1½ in. × 18 ,,	12¼	,, ,,	41¼	,, ,,	37¾
2 in. × 17 ,,	13⅛	,, ,,	43⅛	,, ,,	60¼

Small Quantity extras :

10 cwts. to 5 cwts.	plus ½d. per lb.	
5 cwts. to 2 cwts.	,, 1d.	,,
2 cwts. to 1 cwt.	,, 2d.	,,

Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras ... ... £ 282 s. 0 d. 0

Zinc

		£	s.	d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards	per cwt.	7	18	9
,, ,, 12 gauge (23 SWG), ,, ,, ,,	,,	7	18	3
,, ,, 14 gauge (21 SWG), ,, ,, ,,	,,	7	17	0

Brass Tube

Brass tubes, basic price, plus gauge and manufacturing extras	per lb.	1	11⅜

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£	s.	d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	104	15	0
,, Water Pipe, in coils	,,	107	0	0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	,,	108	10	0
,, ,, ,, over 4 in. dia.	,,	110	10	0
,, Gas or Untinned Compo pipe...	,,	108	10	0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt. :			
3 cwt. and under 5 cwt.	per cwt.	4	0
1 cwt. do. 3 cwt.	,,	6	0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipes to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £53 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£	s.	d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8	11	3
do. White do. do. do.	,,	9	0	9
Sirapite Coarse BSS 1191 Class C do.	,,	9	2	9
do. Fine do. do. do.	,,	9	10	6
do. Browning BSS 1191 Class B do.	,,	9	2	9
do. Board Finish do. do.	,,	9	2	9
Blue Lias Lime, in 6-ton loads	,,	6	17	6
Hydrated Lime (Grey) in 6-ton loads	,,	5	10	0
do. (White) do.	,,	6	0	0
Lump Lime (Grey) do.	,,	5	7	0
do. (White) do.	,,	5	14	6
White Keen's or Parian Cement, in 1-ton loads ...	,,	12	7	6
Pink Keen's or Parian Cement, in 1-ton loads ...	,,	12	2	3
Granite Chips, in 6-ton loads	,,	2	6	9
Hair	per cwt.	4	17	6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.		2	2½
1,200 yds.	,,		2	1½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	8
1,200 yds.	,,		2	7
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	5½
1,200 yds.	,,		2	4½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	11
1,200 yds.	,,		2	10

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	15	0
Gloss Paint	per gal.	2	16	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	5	0	0

Lead Products and Oils

		£	s.	d.
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (1 cwt. lots)	,,	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		16	9
Boiled Linseed Oil (5 gal.) do.	,,		17	8

Sundries

Turpentine substitute (5 gal.) drums extra ...	,,		5	4½
do. do. (40 gal.) do.	,,		4	8½
Solignum, Brown (5 gal. cans) Exterior	,,		10	0
Creosote (40 gal. barrels)	,,		2	3
Paste Powder (1 lb. packets)	per lb.		2	4
White Lining Paper	per piece		1	2

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oak, Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)...	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes...	per ft. sup.		10
24 oz. do. do. do. do.	,,	1	0½
26 oz. do. do. do. do.	,,	1	3
32 oz. do. do. do. do.	,,	1	7½
⅛ in. Rolled Plate...	,,	1	3¾
3/16 in. Rolled and Rough Cast...	,,	1	6½
¼ in. do. do.	,,	1	7½
⅛ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	,,	1	3¾
do. Group 2	,,	1	9¾
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	8½
¼ in. Wired Cast up to 50 in.	,,	1	10½
¼ in. do. do. 50 in. to 72 in.	,,	2	2¾
¼ in. Georgian Wired Cast	,,	1	11
Hollow Glass Blocks—			
P.B.2 Cross reeded 5¾ × 5¾ × 3⅞ in.	each	3	9
P.B.3 Broad reeded 7¾ × 7¾ × 3¾ in.	,,	5	9
P.B.32 Cross reeded 7¾ × 7¾ × 3¾ in.	,,	5	9
P.B.4 Prismatic 7¾ × 7¾ × 3¾ in.	,,	6	6
P.B.5 Flemish 7¾ × 7¾ × 3¾ in.	,,	5	9
P.B.6 Boomerang 7¾ × 7¾ × 3¾ in.	,,	6	6
Half Size Blocks—			
P.B.32 Cross reeded 7¾ × 3¾ × 3⅞ in.	,,	4	10
Radiused Corner Blocks to match up with—			
P.B.2 Cross reeded	,,	8	1
P.B.3 Broad reeded	,,	9	8
P.B.32 Cross reeded	,,	9	8
P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.			
¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	7	6
,, ,, ,, 100 ft. sup.	,,	7	6
¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	,,	11	4
Not exceeding 180 ft. sup. or do.	,,	15	0

Plates exceeding 180 ft. sup. prices on application.

Substances other than ¼ in. Polished Plate at Special Prices.

Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass—	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		7½
24 oz. ,, ,, ...	2,000		9½
26 oz. ,, ,, ...	2,000		11½
32 oz. ,, ,, ...	2,000	1	3½
⅛ in. Rolled Plate...	1,000		10¾
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10¾
do. Group 2	1,000	1	2½
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2½
3/16 in. Rolled Plate or Rough Cast	2,000	1	2
¼ in. do. do.	2,000	1	2¾
¼ in. Wired Cast, Hexagonal up to 50 in ...	2,000	1	5
¼ in. do. do. do. 50 in. to 72 in. ...	2,000	1	9
¼ in. Georgian Wired Cast	2,000	1	5½

THE BUILDER RATES OF WAGES

AS FROM FEBRUARY 6th., 1961. (Every endeavour is made to ensure accuracy but we cannot be responsible for errors)

1. Craftsmen and Labourers.

Region	Craftsmen	Labourers
	s. d.	s. d.
England & Wales (Grade A) ...	5 0	4 4½
London	5 1½	4 6
Liverpool and District ...	5 1½	4 6
Scotland... ...	5 0	4 4½

2. Apprentices.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales
		s. d.	s. d.
15	25	1 3½	1 3
16	33½	1 8½	1 8
17	50	2 6½	2 6
18	62½	3 2½	3 1½
19	75	3 10½	3 9
20	87½	4 6	4 4½

3. Young Male Labourers.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales and Scotland
		s. d.	s. d.
15	33½	1 6	1 5½
16	45	2 0½	1 11½
17	66½	3 0	2 11
18	100	4 6	4 4½

NORTHERN IRELAND is not included; rates fluctuate so much from district to district that reference should be made to local offices.
WATCHMEN.—The rates per shift for watchmen engaged on building sites is 27s. 6d. in London and Liverpool District, and 26s. 3d. in the provinces.
FEMALE OPERATIVES.—In all districts throughout the country except in Scotland the rate of wages for women, aged 19 and over, engaged in craft processes is 4s. 1½d. per hour. Women engaged on work other than craft processes, 3s. 9½d. per hour. In Scotland the rate for the woman craftsman is 4s. 4½d. after a probationary period, and the woman labourer, 3s. 10½d.

British Standards

PVC-Insulated Cables and Flexible Cords for Electric Power and Lighting (BS 2004 : 1961)

Armoured PVC-Insulated Cables (BS 3346 : 1961)

REQUIREMENTS for the insulation thicknesses of 250/440-volt PVC-insulated cables have been reduced in these two British Standards (price 7s. 6d. and 8s. 6d. respectively) which became effective on March 1. These thicknesses are now the same as those specified for polythene-insulated cables in BS 1557. Two new voltage ratings—660/1100 volts and 1900/3300 volts—have been added to the standard range, the lower range being for both armoured and non-armoured cables and the higher for armoured cables only. Provision is made in both standards for either copper or aluminium conductors to be used for cables as required.

The Use of Cold Formed Steel Sections in Building (Addendum No. 1 (1961) to BS 449 : 1959)

THIS ADDENDUM (price 7s. 6d.) is intended for use in conjunction with BS 449, 'The Use of Structural Steel in Building,' and great care has been taken to indicate in the text those clauses of BS 499 which apply to the use of cold formed sections and those which do not. Supplementary information is given regarding materials, design and details of construction, and tests for use in the approval of welders. Included in an appendix are examples of design calculations. A companion standard to the addendum is BS 2994, 'Cold Rolled Steel Sections,' which sets out properties of a number of basic shapes in common use. The methods of design set out in Addendum No. 1, however, apply also to other cold formed shapes that may be required to meet special structural conditions.

Clay Flue Linings and Chimney Pots (BS 1181 : 1961)

MOST DOMESTIC FLUES in this country are still lined by the pargeting method. While often satisfactory for open fires, this method is inadequate for closed appliances. Such appliances send heat into the room, rather than up the chimney and as a result, the flue gases are much cooler than those from an open fire and condensation is therefore liable to occur in the flue. Clay linings laid down in this revised edition of BS 1181 (HMSO, price 5s.) can prevent condensation escaping. Emphasis throughout the standard is on linings for closed fires, rather than open ones.

Three types of fireclay and terracotta flue linings are specified (compared with two in the previous edition). Each type embraces two patterns for use in circular or square flues, and four of the given patterns are either rebated or socketed. Linings with rebated or socketed joints are easier to erect than the butt ended type and they also prevent the escape of condensation. However, there is still such a demand for the 9 in. square and 9⅞ in. diameter butt ended liners, for use with open fires, that these are also included in the standard.

Industrial Rubber Boots (BS 3299 : 1960)

THIS NEW STANDARD, price 4s. 6d., is applicable to general purpose rubber boots and does not cover footwear giving protection against electrical shock or boots having anti-static or conductive properties. It is a companion document to BS 1870 part 2 which covers safety boots, of similar construction, having steel toecaps.

Copies of these standards may be obtained from the British Standards Institution, Sales Branch, 2 Park-street, London, W1.

New Companies

THE FOLLOWING NEW COMPANIES, registered in England, have been announced by Jordan and Sons, Ltd., company registration agents.

H. SPARKS (BUILDERS) LTD.—Regd. May 10, 1961. Nom. cap.: £2,000. Dir.: Harry Sparks, Michita, Shoppenhangers-rd., Maidenhead.

J. D. TAYLOR (BUILDERS) LTD.—Regd. May 11, 1961. 152 Plumstead-rd., SE18. Secy.: Gwendoline S. Taylor. Nom. cap.: £100.

C. RODD & CO. LTD.—Regd. May 11, 1961. Bldr. and contr. Nom. cap.: £10,000. Dir.: Charles Rodd, 'Wallinton,' Peoples Park-rd., Crediton.

THOMAS HAZELL LTD.—Regd. May 11, 1961. Central Hall-bldgs., South-rd., Southall, Middx. Secy.: T. Hazell. Bldg. contrs., etc. Nom. cap.: £1,000.

WHITE & VINCENT LTD.—Regd. May 11, 1961. Bldrs. and contrs., etc. Nom. cap.: £35,000. Permt. dir.: Thos. W. White, Dorwill, Albert-rd., Crediton.

O'KEEFE OF KINGSTON (BUILDERS) LTD.—Regd. May 12, 1961. 60 Surbiton-rd., Kingston-on-Thames, Surrey. Secy.: Mary B. O'Keefe. Nom. cap.: £100.

H. & H. CONSTRUCTION CO. (SOUTHEND) LTD.—Regd. May 12, 1961. 41 High-st., Southend. Secy.: Patricia R. Haigh. Bldrs., etc. Nom. cap.: £1,000.

D. J. HATTO (BUILDERS) LTD.—Regd. May 12, 1961. 29 Goodchild-rd., Wokingham. Secy.: Ruth Hatto. Nom. cap.: £100.

BLYTHE VALLEY BUILDERS & CONTRACTORS LTD.—Regd. May 12, 1961. Bldrs. and contrs., etc. Nom. cap.: £20,000. Dir.: Robert G. Wilcox, 6 Hammersley Hayes, Cheadle, Staffs.

HARVEY & KERIN LTD.—Regd. May 12, 1961. 74 Spon End, Coventry. Secy.: Margaret M. Harvey. Bldrs., etc. Nom. cap.: £1,000.

DYGGOR PLANT LTD.—Regd. May 12, 1961. Station-rd., Ilkeston, Derbyshire. Secy.: Reginald Phipps. Pblc. wks. contrs. and civil engrs., etc. Nom. cap.: £2,000.

D.M.J. LTD.—Regd. May 12, 1961. Bldrs. and contrs., etc. Nom. cap.: £2,000. Dir.: Gerwyn Davies, 67 Eastland-rd., Neath.

HOBBS & DEBLING LTD.—Regd. May 12, 1961. Wheatley-pl., 17 Victoria-rd., Margate, Kent. Secy.: M. J. Hobbs. Bldrs., etc. Nom. cap.: £1,000.

BARTIZEN LTD.—Regd. May 12, 1961. 6 Surrey-st., WC2. Secy.: S. H. Lucas. Bldrs., etc. Nom. cap.: £100.

C. BLACKOUT LTD.—Regd. May 15, 1961. 26 Horseley Heath, Tipton, Staffs. Secy.: W. A. K. Howes. Bldrs., etc. Nom. cap.: £2,000.

J. & W. T. LEWIS (BUILDERS) LTD.—Regd. May 15, 1961. Ardwyn, Orchard-st., Llandovery, Carms. Secy.: J. D. Lewis. Nom. cap.: £4,000.

WEST LANCS. CONSTRUCTION CO. LTD.—Regd. May 15, 1961. 18 Courtenay-ave., Liverpool, 22. Secy.: E. N. Oliva. Civil engrg. contrs., etc. Nom. cap.: £100.

M. & M. BORNE (BRISTOL) LTD.—Regd. May 15, 1961. 108 Hampstead-rd., Bristol 4. Secy.: L. W. Foster. Bldrs., etc. Nom. cap.: £2,000.

ALETROSE LTD.—Regd. May 16, 1961. 6 Surrey-st., WC2. Secy.: Stanley H. Lucas. Bldrs., etc. Nom. cap.: £100.

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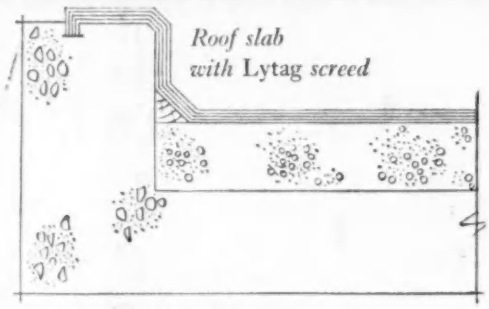
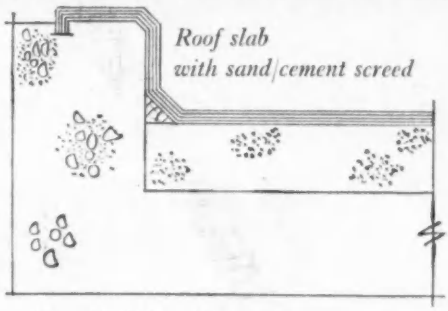


(K= 8·5) ¾″ asphalt
(K= 1·7) 4″ Lytag/cement screed
(K=10·0) 6″ normal structural slab
'*U*' *value*=·26
Wt. of screed ft/sup. 21·0 lbs.



(K= 8·5) ¾″ asphalt
(K= 9·0) 4″ sand/cement screed
(K=10·0) 6″ normal structural screed
'*U*' *value*=·48
Wt. of screed ft/sup. 42·0 lbs.

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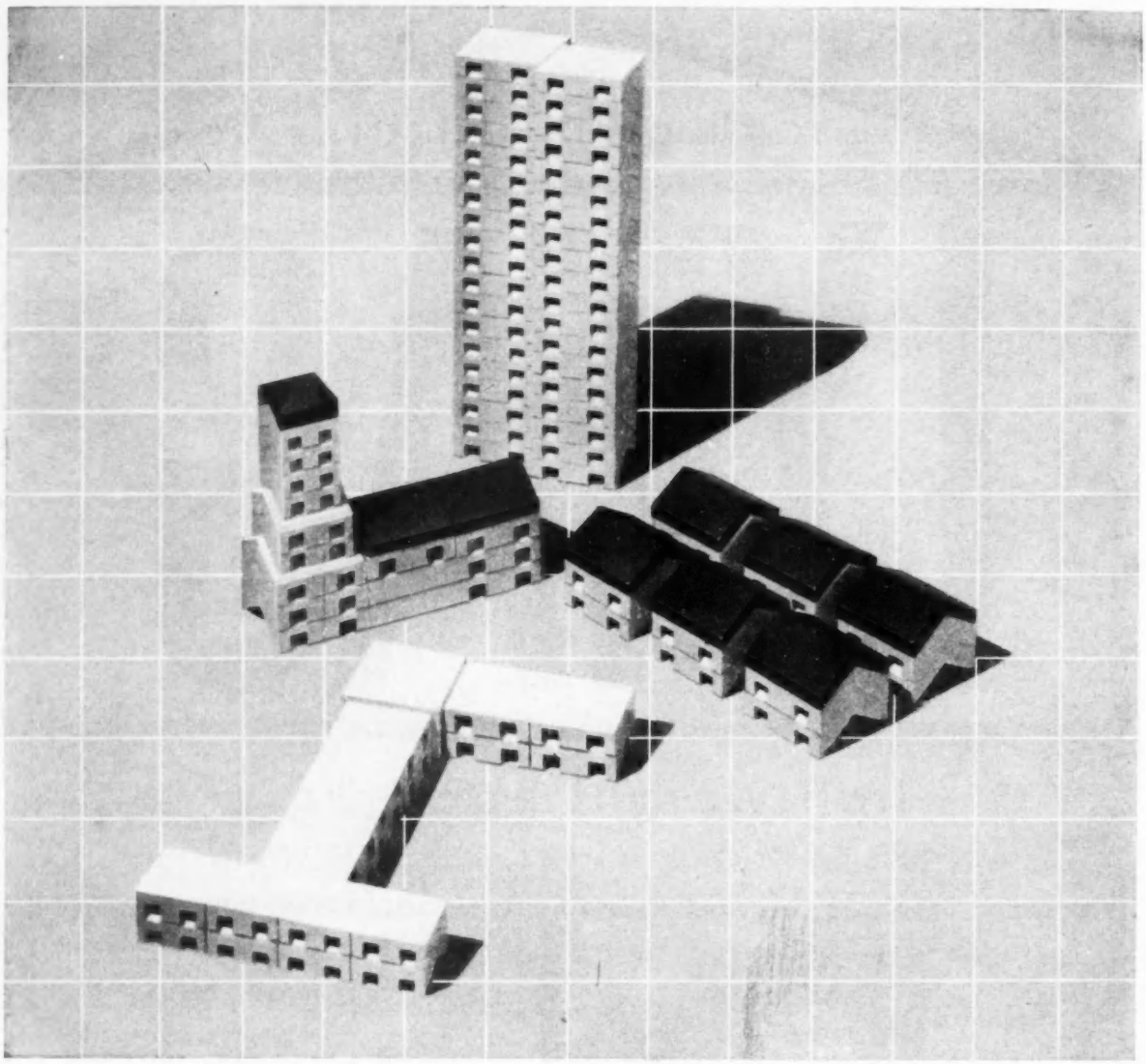

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Marleyflex vinyl asbestos tiles and Marley De Luxe vinyl tiles are available in an exciting and versatile colour range. They are among the most easily maintained floor tiles available, and retain their bright, glowing colours throughout years of wear.
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TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 166 of this issue. The form can be used for more than one inquiry.

1. Contractors' Plant

A new high-speed automatic TUBE BENDER, capable of producing 500-600 bends per hour, permits programme control for a sequence of bending operations. The machine has a maximum capacity for steel tubes of 1½ in. o.d. x 16 s.w.g. thick and non-ferrous tubes of larger sizes. Among its many new features is a patented device which permits right- and left-hand bends to be made without resetting the machine and tooling. This is possible even when successive bends are directly adjacent to each other, that is, without intervening straight, and the device also allows in certain cases for bends of different radii to be produced without the necessity of changing centre formers.

A pre-selector on the control panel permits up to 12 bending variations without resetting any levers and is automatically controlled after each completed operation. The bending head returns automatically and the workpiece is ejected from the centre former groove.

Chamberlain Industries Ltd., Argall-av., Leyton, London, E10.

2. Rooflights

Polyester FIBREGLASS ROOFLIGHTS are now being produced in a basic 6 ft. wide by 2 ft. modular length. The units may be ventilating or non-ventilating. Certain advantages should accrue from their use; for instance breakage and damage in transit and erection is less likely and, because of the unit's light weight, costs can be saved on the roof structure. The rooflight is quick and easy to fix and, once erected, no maintenance is required. One-piece rooflights can be made to any length up to 26 ft., and for longer lengths two or more units are joined by bolts or pop rivets with a moulded plastic cover strip to form a watertight joint.

Cascelloid, Abbey-lane, Leicester.

3. Ventilation

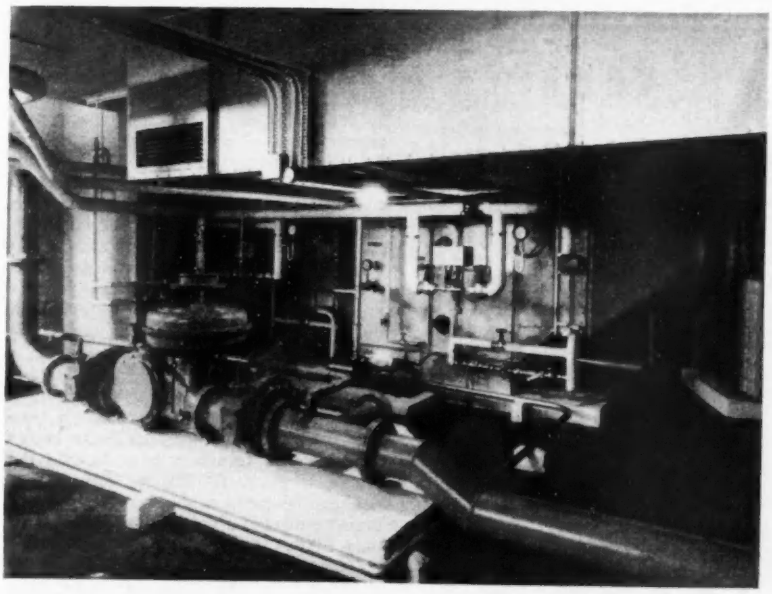
In a recently occupied office block, seven single-unit capillary AIR WASHERS are used to clean, humidify and warm incoming air before it is circulated to the offices. The basic element of the air washer is its capillary cell. Each cell consists of about 57,000 constant diameter glass filaments encased in sheet metal. The cell is 20 in. square and 8 in. deep. The filaments are held in position by patented stabilising screens.

The air washer operates by cold water being sprayed from low pressure nozzles on to the upper face of the cell. The water then slowly drips through the glass filaments and falls into a metal collection tank below. The air, which is drawn from outside the building, is introduced into the system and mixes with the water in the capillary cell which filters and washes it. In practice the cells remove more than 95 per cent by weight of all airborne solid matter. This includes virtually all particles in excess of five microns in size, and most matter down to one micron.

On each side of the air washer unit there is a steam to air heater battery. The pre-heater warms the air before it enters the washer so that correct humidification can take place. The after-heater again warms the air before it is circulated. The batteries will only operate during the winter months.

The adoption of this system enabled the architects, Messrs. Ley, Colbeck & Partners, to incorporate into the design of the building permanently locked double windows with venetian blinds between the panes. This eliminates noise from surrounding streets.

Manwood Miller & Co., Ltd., Colnbrook, Bucks.



A section of the heating and ventilating plant installed at Goodenough House, London, EC3. In the centre is one of the seven capillary air washers

4. Stacks

One of the more recent applications of aluminium in the building field is its use for the cladding of STEEL CHIMNEY STACKS to overcome the specialised corrosion and smut emission problems which sometimes occur. Owing to the heat loss inherent in the use of an ordinary steel stack, an acidic solution condenses from the flue gases on the comparatively cool surfaces of the chimney and rapidly eats away the steel. The acid film also aggregates carbon particles and these may be emitted periodically as acidic smuts.

Aluminium sheet used as a cladding acts as a thermal shield, keeping the chimney walls well above condensation point and so checking corrosion and smut emission. This is the primary effect but there are other advantages also. In an uninsulated steel stack the drop in temperature produces a corresponding drop in the velocity of the gas; by insulating with aluminium, a higher velocity is maintained and the flue gases are carried higher into the atmosphere and are thus more rapidly dispersed. In addition the corrosion resistance of aluminium ensures that the stack is virtually maintenance-free and is made aesthetically more acceptable as an architectural feature.

F. E. Beaumont Ltd., Rathgar-rd., London, SW9.

5. Technical Publications

(a) An information sheet which would be of considerable assistance to readers engaged in the initial finishing or restoration of natural wood cladding has been issued by Mander Brothers Ltd., St. John's-street, Wolverhampton. The sheet lists reasons for a premature breakdown of varnished wood cladding and the company's recommendations for the treatment of new work and for the restoration of bleached or discoloured surfaces.

(b) P. C. Henderson Ltd., of Romford, Essex, has issued a catalogue dealing extensively with sliding door gear. Divided into seven different sections, it describes in considerable detail the use of the gear in schools, churches and private garages. Copies obtainable from the company.

News in Brief

Pay Increase for Glaziers

THE NORMAL WORKING WEEK of glaziers and wall liners is to be reduced to 42 hours from July 3. On the same day an increase in the wage rate of 6d. an hour will become payable. There will be proportionate increases for apprentices.

Town Planning Course at Brixton

THE BRIXTON SCHOOL OF BUILDING is offering a part-time day course in town planning to commence in September. The course, which will extend over three years and require attendance on one full day each week, will lead to the intermediate examination of the Town Planning Institute. Applications should be addressed to the Head of the Department of Architecture and Surveying, Brixton School of Building, Ferndale-road, London SW4.

DSIR's Increasing Activities

THE REPORT for 1960 of the Research Council of the Department of Scientific and Industrial Research, published as a Command Paper (Cmd. 1365) and available from HM Stationery Office, price 4s., notes that DSIR expenditure increased from £8.9m. in 1958-59 to £12.2m. in 1960-61. Other points mentioned are the need for support from the universities in the matter of staff; the increasing research into problems of pollution; and a recommendation that research should be undertaken into the fatigue of structural materials.

Apprentice of the Year

THE POPULARITY and success of the scheme of apprenticeship awards of the Eastern Federation of Building Trades Employers will result in the offer of a place to the apprentice of the year at an outward bound school in September, 1962. In addition to this the Federation will continue with its senior apprentices' week-end course, up to 30 free places to be allotted to those most likely to benefit.

Croydon Television Tower Approved

MR. HENRY BROOKE, the Minister of Housing and Local Government, has given the Independent Television Authority planning permission to build a 500-ft. television tower at Beulah Heights, South Norwood Hill, Croydon. The consent is for a period of five years only.

LMBA Safety Activities

IN AWARDING the Sir George Earle Trophy for 1961 to John Laing Construction Ltd. the National Executive Committee of the Royal Society for the Prevention of Accidents commended the endeavours of the London Master Builders Association in the field of accident prevention. It is the first time since the award of the trophy that the adjudicating panel has made this commendation.

Prize Competition in Turning

THE WORSHIPFUL COMPANY OF TURNERS has combined in one competition various of its awards and competitions fostering the craft of turning. This 'prize competition' is to be held by the Company in January, 1962, and will consist of three classes—under the headings, turning in wood; turning in any one material other than wood or in any combination of materials which may include wood; and pottery. The awards will be made in the light of criteria in design, craftsmanship and materials used. Entries should be submitted to the Clerk of the Worshipful Company of Turners (from whom entrance forms and further details may be obtained), at Apothecaries' Hall, Black Friars-lane, London, EC4, by January 15.

Course on Timber Design

A COURSE on 'Design Opportunities in Timber' is to be held at the York Institute of Advanced Architectural Studies from September 15 to 19. The course, which is being sponsored in conjunction with the Timber Development Association, is planned to give architects, surveyors and builders the latest information on recent international developments and design possibilities in the use of timber as a structural material. It will also deal with functional, aesthetic and economic advantages. Further details may be obtained from the secretary of the Institute, at Micklegate, York. The tuition fee will be 8 guineas.

Timber Engineering for Lecturers

A COURSE on timber engineering will be held at the Department of Civil Engineering (University of Durham), King's College, Newcastle-upon-Tyne, on July 17-21. The course, which has been arranged by the Timber Development Association, is being held by kind permission of Professor W. Fisher Cassie, Head of the Department of Civil Engineering. The course, which will include a site visit and demonstrations, as well as lectures, is planned to give lecturers in civil and structural engineering and in building, the latest information on developments in the structural use of timber. Further information from Mr. A. J. Browning, North-Eastern Regional Officer, TDA, at 18 Park-row, Leeds.

YOUR
TIMBER
MERCHANT
will tell you
about
ROYAL
RMML

MoW Slating Experiment

AN EXPERIMENT is being carried out by the Ministry of Works on buildings in Anglesey whereby a roofing system which eliminates double lapping may result in a saving of possibly 45 per cent in costs. It will be some time before any official pronouncement is made regarding the experiment. It is claimed that the use of slates 16 in. by 10 in. instead of 20 in. x 10 in., plus less time required to complete the roofing operation, will contribute to the saving in cost, while a larger market will be created for the smaller slate. Polythene sheeting is used instead of underfelt, and plastic instead of putty has been used for sealing joints.

Iron Castings Production

THE TOTAL OUTPUT of iron castings in the first quarter of 1961 at 1,026,100 tons compares with 1,024,700 tons in the previous quarter. Output of castings in the building and domestic sections of the industry at 151,000 tons shows an increase of 1.5 per cent over the last quarter of 1960 and an increase of 0.1 per cent over the first quarter of 1960.

International Apprentice Competition

JULIAN GARETH NETTLE, an 18-year-old third-year apprentice bricklayer of Alders-grove, Cricklewood, employed by John Laing Construction Ltd., has been chosen to represent the United Kingdom in the junior brickwork section of the 10th International Apprentice Competition to be held at Duisberg, Germany, from July 3 to 7. The British team entry is administered by the City and Guilds of London Institute.

Scientific Attaché at Tokyo

DR. CHARLES MANDERS was on May 24 appointed by the Department of Scientific and Industrial Research to the newly-created post of scientific attaché to the British Embassy at Tokyo. He will advise the British Ambassador on scientific matters and report on Japanese scientific and technical development in the civil field. Another appointment is that of Mr. William Drury as successor to Mr. G. H. Greenhalgh, whose tour of duty as scientific attaché to the British Embassy at Stockholm ends soon.

The Essential Company Aeroplane

FORTY of the leading industrial and business undertakings in Great Britain who regard a company aeroplane as an essential means of transport have formed the Business Aircraft Users Association. Among the new association's aims is the improvement of airport facilities for business fliers. Mr. Kenneth McAlpine, of Sir Robert McAlpine & Sons Ltd., is a member of the first council now appointed. Headquarters of the association are at Londonderry House, Park-lane, London, W1.

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Lorry-Mounted Crane Association

THE NEWLY ELECTED COMMITTEE for the second year of the association's activities, 1961, comprises representatives of John Griffith and Son Ltd., Liverpool; Smiths Enterprises (Glamorgan) Ltd., Bridgend; Wood, Pritchett and Partners, London; Mobile Lifting Services Ltd., Rotherham; Thomas W. Ward Ltd., Sheffield; and John Young and Co. (Kelvinhaugh) Ltd., Glasgow. Mr. V. L. Holloway, of Mobile Lifting Services Ltd., has been re-elected chairman.

A Colour Film on Boilers

A NEW colour film entitled 'Space Age Steam' has just been produced by J. Stone & Co. (Deptford) Ltd., London, SE4. Its first public showing took place at the Colour Film Services theatre, London, on May 12. The purpose of the film is to make available to a wide cross-section of engineers, steam users and students greater knowledge of the company's 'Stone-Vapour' boilers — the design principles; method of construction and test; and also typical applications in the UK.

Plastering Contractors' Year Book

COPIES ARE NOW AVAILABLE of the 1961 Year Book of the National Federation of Plastering Contractors, president, Mr. G. J. Foreman. Applications should be made to the Federation, at 82 New Cavendish-street, London, W1.

Technical Teachers' Conference

THE FIFTY-SECOND ANNUAL CONFERENCE of the Association of Teachers in Technical Institutions is to be held at the Playhouse, Buxton, Derbyshire, from May 20 to 22. Resolutions on the agenda include an executive priority resolution on the recent Government White Paper, 'Better Opportunities in Technical Education,' together with resolutions dealing with the future of higher education, educational finance, grants to students, the Beloe and Crowther reports, colleges of advanced technology, art education, compulsory day-release, the extended college year, and salary policy.

Lifting Equipment for Cranes

THE TENTH DIGEST in the Building Research Station's second series, 'Lifting Equipment for Cranes,' supplements Digest 129 of the first series, which described types of crane available and showed how their use bears on building design and layout. The present publication concerns the selection of ancillary equipment —such as skips, slings, containers and grabs—which is suitable for the variety of loads to be handled.

Personal Column

COL. J. R. MARRIOTT has been appointed chairman of Robert Marriott Ltd., and MR. E. A. BROOK managing director of the company.

MR. J. A. E. TRINDER has been appointed group sales director of the Turriff Group of Companies. He remains also on the Board of Messrs. George E. Taylor & Co. (London) Ltd., a member company of the Group.

MR. R. O'NEILL, joint managing director and general sales manager of C. H. Johnson (Machinery) Ltd., has retired after 48 years with the company. MR. R. A. BATTINE has been appointed sales director of the contractors plant division and MR. C. H. NEESOM, materials handling division sales director. MR. E. S. PITCHER is now sales manager, London and Home Counties area.

Trade News

New Premises

AYGEE LTD. have moved their head-quarters offices, glass division and hospital equipment division from Century House, 100, Westminster Bridge-rd., to new premises at Tanner-st., Bermondsey, London. This is a three-storey office building and single-storey factory, with a total floor area of 80,000 sq. ft. The new factory is being equipped with the most modern plant for the rapid processing of every type of work in glass.

Price Reduction

BIP REINFORCED PRODUCTS LTD. announce price reductions of five to ten per cent in SE Filon structural sheeting. These reductions have immediate effect.

New Ducted Heater

THE CALOR GAS (DISTRIBUTING) CO. LTD. reports that it has successfully modified and reduced its Comet industrial space-heater to provide ducted heat. A batch of the new units will go into production following completion of extensive field trials with a major firm of contractors.

Opening of Technical Centre

THE GKN TECHNICAL CENTRE, situated at the Screw Division of GKN (Midlands) Ltd., Smethwick, will be opened on May 26. The Centre will be used for the training of the company's personnel and can also be used by customers' staffs.

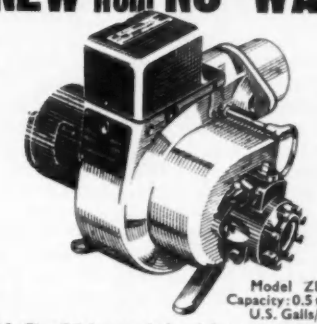
Price of Ceiling Panels Reduced

THE BASIC PRICE of Bowater thermal/acoustic panels has been reduced from 9s. 9d. to 7s. 6d. This is for the perforated standard hardboard panel. This range of panels is also available in a wider variety of finishes.

Change of Address

ROWEBB, LTD., and its associated firms of Rowebb Storage Ltd. and Rowebb (Export) Ltd., are moving on June 10 to 227, West George-street, Glasgow, C2. The telephone number remains the same, City 5256/9.

NEW from NU-WAY



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New Sales Office

THE SALES AND SERVICE DIVISION of Goodyear Pumps Ltd., have moved to new offices at Walmgate-rd, Perivale, Middlesex. They still retain a West End office at 44 Brook-st., W1, London head-quarters of their parent company, Holman Brothers Ltd., of Camborne, Cornwall.

Basic Materials

A Further Rise in Prices

PROVISIONAL ESTIMATES for April show effects of mainly small but continuing increases in wholesale prices. The combined price index for basic materials and fuel used in manufacturing industry as a whole, increased by 0.4 per cent to 101.2 (1954=100) as compared with the revised (0.1 higher) index for March. The provisional figure for building and civil engineering materials for April at 150.1 shows an increase of 0.2 per cent over March. The house-building materials index showed a provisional increase of 0.2 per cent.

Commodity	April, 1960	Mar., 1961	April, 1961
Coal	137·0	147·0*	147·1*
Slates	136·1	139·2	139·2
Refractory goods, including bricks	127·0	129·4*	129·4
Non-refractory goods, including bricks	113·5	121·7	121·7*
Building bricks, common, other than fletton, ex-works	117·4	123·8	123·8*
Building bricks, fletton common, delivered	105·2	117·5	117·5*
Glass (other than containers)	121·5	123·1*	123·1*
Cement, delivered	113·2	115·3	115·3
Cast stone and cast concrete products	103·6	103·3	103·5*
Synthetic resins and plastic materials	89·5	86·9	86·6*
Paint for building and decorating	108·4	109·0	109·2*
Steel sheets	126·5	126·1	126·1
Aluminium and aluminium alloy products (extruded and drawn)	129·0	132·3	132·3
Galvanised cisterns, tanks and cylinders	126·9	132·9	132·9
Home-grown hardwood ...	95·7	96·8	96·8
Wallpaper	119·8	123·5	123·5
Aluminium, virgin ingot, delivered	119·2	119·2	119·2
Copper, ex-ship, wharf or warehouse	105·5	90·6	92·2
Lead, ex-ship, wharf or warehouse	80·4	68·4	69·5
Zinc, ex-ship, wharf or warehouse	118·1	108·1	107·2
Imported hardwood (ex-yard or wharf)	108·2	113·1	112·6*
Imported plywood (delivered to consumers)	95·9	99·7	99·7*
Imported softwood (delivered to consumers)	103·2	107·5	107·5*

* Provisional.

OVERSEAS BUILDING

From Our Own Correspondents

ARGENTINA.—Tenders are to be called in June for the construction of an airport near the city of Neuquén, at a cost of 500m. pesos.

ARGENTINA.—The Banco de la Provincia de Buenos Aires, Argentina, has granted a 1,000m. peso credit to finance road works, especially in the Province of Buenos Aires.

CANADA (ALBERTA).—A $6m. sulphur plant is to be constructed at Cochrane. . . . Construction of a $2.5m. shopping centre, on Edmonton's Whyte-avenue, will start immediately.

CANADA (BRITISH COLUMBIA).—Tenders for the first phase of the $3m. college of education building, at the University of British Columbia, have been called. . . . MacMillan, Bloedel and Powell River Ltd. is discussing the construction of a pulp and paper mill in Australia. . . . Deeks McBride Ltd. has announced a $2m. construction programme for Vancouver and Richmond.

CANADA (MANITOBA).—A 1,200-mile road construction, and reconstruction, programme has been announced by the Provincial Government. . . . Plans have been announced, by the Provincial Government, to construct a $3.5m. institute of technology at Brooklands. . . . A $7.5m. public works construction programme includes: Construction of a bridge near Turtle Mountain; municipal buildings at West Kildonan and Edward; renovation of municipal buildings at Swan River and Minitonas; and structural alterations to the Municipal building at Brandon. . . . A $5m. construction programme has been announced for the Port of Churchill.

CANADA (NEWFOUNDLAND).—Two hotels are to be constructed, one at Gander and the other at Port Aux Basques. They are to be operated by the Hotel Corporation of Newfoundland. . . . A contract has been awarded to B. A. Ryan Ltd., of Montreal, for the construction of a townsite at the Wabush Iron Co.'s development at Labrador. The estimated cost is $3.5m.

CANADA (ONTARIO).—The Steel Company of Canada has approved the expenditure of $25m. for the expansion of its Hamilton plants. . . . Two hotels, to cost $4m. each, are to be constructed near the International Airport at Malton; an industrial development is also planned for this area; aeroquays, runways, and hangars, to cost $10m., are part of the programme at the airport itself. . . . A $3m. Faculty of Music building is to be constructed at the University of Toronto. . . . A $3.2m. Home Furnishings Building is to be constructed at the Canadian National Exhibition. . . . The Collins Radio Co. is to construct an additional building to its premises at Toronto. . . . Construction of Toronto's $24m. city hall is to begin on September 1. . . . Construction scheduled for Ontario's universities includes: Ottawa University, a $2.5m. engineering building, a $1.75m. first wing of the arts building, a $1.5m. physics and mathematics building, a $1.35m. first wing of the medical building, a $1m. law building, a $1m. residence building, a $7m. university hospital, and a $4.1m. doctors and nurses residence. Carlton University plans to spend $6m. on construction by 1965. York University plans the construction of three additional campuses. The University of Toronto's programme is to cost $100m. during the next few years. The project calls for the construction of 19 buildings. . . . The Province of Ontario plans to spend, this year, an estimated $269m. on the construction of highways, roads and streets.

CANADA (QUEBEC).—Three pulp and paper mills are to be constructed on the Cape Peninsular, at New Richmond, Bonaventure and Matane, by the Bathurst Pulp and Paper Co.

CANADA (SASKATCHEWAN).—The University of Saskatchewan has purchased a 100-acre site for the extension of its construction programme on the outskirts of Regina.

MOZAMBIQUE.—The Direcção dos Serviços dos Portos, Caminhos de Ferro e Transportes de Moçambique has invited tenders for the construction of four blocks of flats at Mahotas. The closing date is June 12, and a guarantee deposit of 70,000 escudos is required.

NIGERIA.—Costain (West Africa) have negotiated a contract with the Northern Nigerian Government for the reconstruction of the road and bridges between Zungeru and Bida. The road is 63 miles long and it is expected that work will take about 18 months to complete. The contract is valued at about £½m. A contract has also been let for the reconstruction of 57 miles of road from Katsina to Daura in Northern Nigeria. This site is in the extreme north of the country, virtually on the edge of the Sahara Desert. Work, which will cost £300,000, is to start immediately. Both contracts are being carried out in association with Alhaji Audu Bida.

SUDAN.—The proposal to build a large hotel to international standards at Khartoum is reported by Barclays Bank DCO to be still under consideration. The Government has pledged a certain measure of financial support for the project, which it is estimated will cost at least £S2m.

UGANDA.—An order for prefabricated steelwork worth £20,000 has been placed with a British firm for a new bridge over the Nile at Karuma Falls by the Uganda Ministry of Works. The bridge, which will have a total span of 270 ft. in three sections—the longest being 160 ft.—will cut the road journey from Masindi, in the Western Province, to Pakwach, in the Northern Province, by more than 30 miles. Design work for the foundations and piers is going ahead, so that the crossing may be linked with the existing road system. The whole project, including the new roads, is expected to cost £¼m.

SCOTTISH BUILDER

Attracting Industry to Glasgow

THE impression has been wrongly created that because of overspill Glasgow does not want new industry, MRS. JEAN ROBERTS, the Lord Provost, said on May 12 after a meeting of the corporation special committee on employment and training.

Concerned about the run down of heavy industry, the committee are to seek the help of the Secretary of State for Scotland, Mr. John Maclay, and the President of the Board of Trade, Mr. Reginald Maudling, in their efforts to bring work to the city. They are to emphasise the need for a greater diversification of industry.

Mrs. Roberts said they were particularly anxious to attract light industry, such as the manufacture of plastics and chemical and electrical goods. Sites were available at South Nitshill, Drumchapel, and Castlemilk, with large pools of labour available in the housing schemes near-by.

New Buildings

BRECHIN.—The TC is progressing with its Bridge-st./Union-st. redevelopment scheme. The first phase of 44 houses will have electrical underfloor heating. Policy for the remaining 52 houses has not yet been decided.

CARLUKE.—The Weir Housing Corporation (Coatbridge) have been given a £129,398 contract to erect 76 timber houses at Burnwood, Carluke, a war-time RAF camp.

CLYDEBANK. — TC has approved a scheme of redevelopment to fill the gaps in the old town resulting from the war-time blitz of the town. Now, multi-storey blocks will be erected and work is already in progress. Seven blocks, each 15 storeys high and set in landscaped surroundings, will be completed at Kilbowie. Each block has 56 3-apart. houses giving a total of 392 houses to the scheme. This scheme will involve the largest number of multi-storey blocks on one site in Scotland. General planners for the redevelopment are Sir Frank Mears & Ptnrs. The SSHA are carrying out the work.

GLASGOW.—The House of Fraser are to build a fourth storey on their Arnott Simpson store.

GLASGOW.—The Scottish Co-operative Wholesale Society Ltd. has received approval from the Dean of Guild and Planning Com. for a £200,000 6-storey warehouse erection at Morrison-st./Laidlaw-st. to link up with the SCWS main existing properties there.

GRANGEMOUTH.—BP Refinery (Grangemouth) Ltd. has been granted Dean of Guild approval for a £¼m. project involving a new administration, catering and public relations block at Bo'ness-rd. This is a continuation of the considerable programme of building by the petroleum industry in this area in the post-war years. . . . TC propose 99 houses and 90 garages at Loanhead-ave./Claret-rd. at a cost of £197,000. Approval has been given for this scheme.

INVERAWE.—William Bain & Co. Ltd., of Coatbridge and London, have secured a £17,000 contract for the supply and erection of steelwork for the power-house of the North of Scotland Hydro-Electric Board's new station at Inverawe.

STIRLING.—The CC has approved the second phase of the West Stirlingshire Regional Water Supply Scheme at a cost of £156,000.

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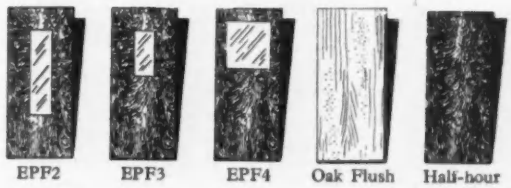
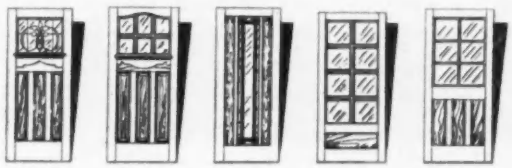


EPF2 EPF3 EPF4 Oak Flush Half-hour Fire Check



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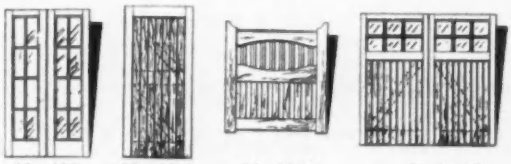

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THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that applications must be received by this date.

BUILDING

JUNE 5

(AR) CHESHIRE CC.—Extensions and adaptations at The Grange sec. mod. sch., Ellesmere Port. County A. Dep. £2 2s. Tenders by July 11.

PORTADOWN.—Construction of 100 houses, with ancillary works, at Garvaghy-rd. Boro' A, Thomas-st., Portadown, Co. Armagh. Dep. £5.

STRABANE UDC.—Erection of 97 dwellings and siteworks at Bradley's Field, Strabane. F. H. Wright & Ptnrs., quantity surveyors, 79 Botanic-ave., Belfast 7. Dep. £5 5s.

JUNE 7

GALWAY (Eire).—Erection of 44 houses, with works and development, at Merview estate, Galway. P. J. Sheahan, architect, 47 O'Connell-st., Limerick. Dep. £10 10s.

(AR) SMETHWICK CBC.—Erection of 21 old people's dwellings at Perry Hill, Oldbury. Boro' E&S. Dep. £2 2s. Tenders by July 10.

JUNE 9

(AR) NEWCASTLE REGIONAL HOSPITAL BD.—New boiler house at Newcastle General Hospital. Sec. to Bd.

JUNE 10

(AR) ESSEX CC.—Firm price tenders for: (a) Erection of Rochford Hawkwell Holt jun. sch. (b) Construction of a groundsman's house and sports pavilion at playing field, Writtle. County A. (separate applications).

JUNE 12

(AR) WYCOMBE RDC.—Erection of 100 units of accommodation at Princes Risborough, Wooburn and Bourne End sites. E&S.

JUNE 16

(AR) CANTERBURY CITY C.—Inclusion in selected list of approved building contractors. TC.

(AR) EASTBOURNE CBC.— (a) Erection of 3 2-storey blocks of 4 flats on land at Green-st. farm cottages. (b) Erection of 68 houses and flats and 16 garages at Port-rd. Boro' S. Dep. £2 2s. Tenders by July 10 and August 14, respectively.

(AR) SWANSEA CBC.—Erection of four caretakers' houses at Portmead, Blaen y Maes and Fairfield-rd., West Cross. Boro' A. Dep. £5.

(AR) WEST SUSSEX CC.—New hall, staffroom, etc., at Thomas Bennett sch., Crawley. County A.

JUNE 19

(A) KETTERING BC.—Fixed price tenders for the erection of sports pavilion and refreshment rooms at Glebe playing field. Boro' E&S. Dep. £2 2s.

JUNE 23

(A) LOWESTOFT BC.—Erection of 76 dwellings at Gunton estate. Boro' E. Dep. £2 2s.

JUNE 24

(A) SAFFRON WALDEN RDC.—Erection of six bungalows at Elmdon, Essex. Clerk to C.

JUNE 27

(A) BASINGSTOKE BC.—Erection of 413 dwellings and 264 garages at South Ham estate. Boro' A. Dep. £3 3s.

JULY 7

(A) ABINGDON BC.—Fixed price tenders for 10 dwellings at Gainsborough Green. Caren, Roscoe-Hudson & Ptnrs., architects, 6 Station-rd., Abingdon, Berks.

JULY 17

(A) CHATHAM BC.—Erection of: (a) Block of 19 maisonettes at Ordnance-st.; (b) 12 flats at Perry-st. Boro' E&S. Dep. £2 2s.

NO DATE

(A) BLACKPOOL. — Erection of St. Catherine's RC sec. sch., Garstang-rd. C. E. Jackson, architect and surveyor, 27 Abercorn-pl., Clifton-dr., Blackpool.

SERVICES, PAINTING, MATERIALS, ETC.

JUNE 9

(AR) BRISTOL CITY C.—Fixed price tenders for internal redecorations and alterations at Snowdon-rd. home, Fishponds. City Estates Valuer.

(AR) HALIFAX CBC.—Remedial work at Whitehill county prim. sch. Boro' E.

JUNE 10

(AR) BOURNEMOUTH CBC.—Fixed price tenders for roof tiling sub-contract work at Kinson estate. Boro' A.

JUNE 13

(A) KINGSTON-UPON-THAMES RBC.—Roof repairs to 3-storey block of 9 flats in borough. Boro' S. Dep. £2 2s.

JUNE 14

(A) SUNDERLAND CBC.—Painting work and provision of linoleum tiles, etc., at various educational premises. Director of Ed.

JUNE 15

(A) WOOD GREEN BC.—Reconstruction of chimney stacks at White Hart-la. estate. Boro' E.

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remains unimpaired through centuries of climatic extremes and atmospheric pollution. That is why growing numbers of contemporary architects turn to this natural material for external and internal facings, flooring, coping and cills. It is available naturally riven, frame sawn or fine rubbed in three distinct colours, Light Sea Green, Olive Green, Pale Green Barred. Send for leaflet and details of easy fixing.

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JUNE 16

(A) BRENTFORD & CHISWICK BC.—Internal and external redecoration of east wing of Chiswick county girls' sch. Boro' E.

(AR) SLOUGH BC.—Supply and fixing of various materials, etc., to 238 houses at Parlaunt Park, Langley. Boro' E.

JUNE 19

(A) KINGSTON-UPON-THAMES. — Roof repairs to nine flats in borough. Boro' S. Dep. £2 2s.

(A) STAINES UDC.—Fixed price tenders for repainting and redecoration of external elevations to 170 dwellings at Viola-ave., Stanwell. E&S. Dep. £2 2s.

JUNE 22

(A) GUNERSBURY PARK JOINT COM.—Oil burner installation at farm dressing rooms and treble span greenhouse. Boro' E.

JUNE 26

(A) READING CBC.—Fixed price tenders for alterations to cloakroom, changing rooms and showers at Reading sch. Boro' A.

JUNE 27

(A) WEST HARTLEPOOL CBC.—Supply and laying of 'vynal' floor finishes at High sch. for girls. L. Auton, architect, Regent-bldgs., York-rd., West Hartlepool.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

JUNE 12

(A) BOSTON UDC.—Surface dressing of approx 105,000 super yds. of roads. Boro' S.

DOWNPATRICK RDC.—Laying of 16¾ miles of 3-in. dia. spun-iron water mains. RDC, Quoile-rd., Downpatrick, Co. Down. Dep. £3.

GENERAL BUILDING WORK (LONDON)

BERMONDSEY. — Reconstruction.—MBC propose the reconstruction of Neckinger depot (garages, etc.). Boro' E has prepared plans, and the total estimated cost of the scheme is expected to be £185,440. . . . The Council have been told that there are now 508 dwellings and 4 shops in course of construction in the Borough.

KENSINGTON. — £20m. Redevelopment Scheme.—Approval in principle has been given by the LCC to the scheme for the comprehensive redevelopment of the junction of Knightsbridge, Brompton-rd. and Sloane-st., London, SW7. Proposed by Capital and Counties Property Co. Ltd., the scheme is estimated to cost £20 million. More than 1¼ million sq. ft. of shops, offices and residential and hotel accommodation are expected to be provided on the five-acre site. The architects are Guy Morgan and Partners, 12a Eaton-sq., London, SW1.

LONDON (City). — Office Space. — The Crown Estate Commissioners have received £615,000 for 17,000 sq. ft. of empty site next to Rolls Building at 112-115 Fetter-la. It was submitted for them by Weatherall Green & Smith and bought for Hallmark Securities by Graves, Son & Pilcher. The site is zoned for an office building.

ST. MARYLEBONE. — Appointment of Architects.—The MBC are to appoint architects to prepare a scheme for the development of the Clipstone-st. area.

ST. PANCRAS.—Flats.—42 flats are to be built on the Ferdinand-st. estate extension by St. Pancras Council at a cost of £133,237.

SHOREDITCH.—Layout Plans.—The MBC has approved layout plans for 134 dwellings at St. John's estate.

WALTHAMSTOW. — New Flats. — Redevelopment of Walthamstow Council's clearance area at Tenby-rd., Southcote-rd. and Newman-rd. will cost £292,670. The scheme includes 24 one-bedroom flats, 28 three-bedroom flats, 65 two-bedroom flats, and 117 garages.

WESTMINSTER.—General Building Work.—Planning permission has been given for a hotel and shops to be built at 80-84 Jermyn-st., 18-20 Duke-st., St. James's and 2-5 Mason's-yard. Another hotel is approved for erection over the Victoria Garage, Gillingham-st. Other new buildings approved include shops, offices, restaurant and flats for 84-98 Petty France and 1-17 Palmer-st.; a theatre, shops, showrooms, store, public

house and offices for 408-422 Strand, and sites in Bedford-st., Maiden-la., Heathcock Court, Exchange Court and Bull Inn Court. The LCC has turned down a plan to which Westminster Council had no objection in principle. It is for a shop and showroom business at 443-445 Oxford-st. By contrast, the LCC approved the use till the end of 1963 of a ground floor and basement at 2 Charlwood-st. as a licensed non-dining club. Westminster opposed this grant of permission.

WIMBLEDON.—School Improvements.—Surrey Education Com. has authorised an expenditure of more than £30,000 on improvements at the Wimbledon county sch. for girls in Merton Hall-rd., to include a new main hall, new kitchens and new tennis courts.

WIMBLEDON.—Baths Modernisation.—The Boro' E&S is to submit plans to the MoHLG for the first phase of a modernisation scheme for the Latimer-rd. baths, to include a new boiler house and boilers, a new floor and store, and new filters and ancillary plant for pool No. 2, at an estimated cost of £45,000.

(PROVINCIAL)

ABERGELE.—Denbighs. CC propose erection of fire and ambulance stations/library/clinic at Pentre Mawr.

ALDERSHOT.—CRE Southern Command, Salisbury, propose 55 married quarters at Cleveland-ter., North Camp.

AMERSHAM. — The Amersham Free Church propose erection of a new Church at Woodside-rd., Amersham-on-the-Hill. Architects: McMorran & Whitby, 14 North Audley-st., London, W1.

ANDOVER.—NW Hants. Area Planning Com. has approved following: Plans for fire station and caretaker's house at London-st. for CC; residential development of 5 acres at Anna Valley for Mr. R. B. Southwell; plans for a 1m.-gallon reservoir on site adjoining BC's present one at top of Chalk Hill, Micheldever-rd., for BC; and is to consider applications by Sterling Poultry Products Ltd. for erection of a bungalow and two broiler houses on each of four sites at Kimpton, Quarley and Thruxton.

ASHTON-UNDER-LYNE.—Following for BC: Five blocks of 4-storey maisonettes and 3 blocks of 12-storey flats at Ellison-st. redevelopment area.

AYLESBURY.—BC propose erection of 122 dwellings and 90 garages at Oakfield estate. . . . Nestle Co. Ltd. propose new premises at High-st. Architects: Beard, Bennett, Wilkins & Ptnrs., London. . . . Burtley Development Co. Ltd., London, propose erection of shops and office block at George-st. Architects: W. Rossell Orne & Ptnrs., 55 Manchester-st., London, W1. . . . William Press & Son Ltd., London, propose offices and stores at Park-st. . . . BC to negotiate tender with Drabble Construction Ltd., Wellingborough for 2 new factories at Gatehouse and Stocklake industrial estates.

BASINGSTOKE.—Erection of 22 houses at Oakley-la. are proposed by Bernard McManus Ltd., High Wycombe.

BEDLINGTON.—Plans have been approved for the erection of 3-storey flats on the Wansbeck estate. The estate developers are William Leech Ltd., St. James'-st., Newcastle-on-Tyne.

BELFAST.—Pile boring operations have been started on the site for Belfast's new £550,000 College of Art in York-st. Before work on the actual building itself can begin, in about three months' time, 370 piles will have to be sunk through a layer of thick 'sleech' before a hard solid base is reached on clay 60 ft. below ground level. And when the five-storey building goes up, each pile will have to carry a weight of almost 100 tons. To make this possible, new 24in. dia. concrete piles will be used—for the first time in Northern Ireland. A combined assembly hall and theatre will be included, and the project will take three years to complete.

BERKS.—CC has approved an estimate of £57,875 for completion of Furze Platt cty. mod. sch., Maidenhead, and also propose extensions to East Berks. College of Further Education and Berks. College of Art.

BILLERICAY (Essex).—North East Metropolitan Regional Hospital Bd. propose a new boiler house and plant at St. Andrew's Hospital. Est. £97,530.

BIRKENHEAD.—BC propose extensions to Technical College. Est. £170,000. . . . Walker Cain Ltd. propose erection of new licensed premises at Park-st. Est. £28,000.

BLACKBURN.—Two office blocks, 3 storeys and 6 storey respectively, are proposed for Government Departments at Ainsworth-st. Est. £¼m.

CHRISTCHURCH. — Proposals for improvements to be made to Christchurch Hospital are to be submitted to the Minister for approval.

COLWYN BAY.—BC propose comprehensive development for aged people at Minafon estate, Old Colwyn.

COOKSTOWN (Co. Tyrone).—W. & M. Given, 33 Molesworth-st., Cookstown, are the architects for 58 houses at Bluedoors for RDC.

CULHAM (Oxon.).—AEA has approved second stage comprising laboratories and lecture theatre at the new atomic establishment.

DRONFIELD.—Father Emil Puttman proposes erection of Church Hall and Presbytery at Green-la.

DURHAM.—Factory additions are proposed for New Equipment Ltd., Croxdale. Architects: Tarren & Caller, 24 Front-st., Sedgefield.

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

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EIRE.—The total fee payable to Professor Robert Matthew, planning consultant appointed by the Northern Ireland Ministry of Health and Local Government, to carry out a survey of the whole Belfast region for house-building purposes, will be £23,500. This was announced by Mr. W. J. Morgan, the Minister, when detailing his departmental estimates in the Ulster Commons. Mr. Morgan said Professor Matthew had already furnished an interim report in which he had indicated land suitable for immediate large-scale public authority building outside the city.

KINGSTON.—Bentalls of Kingston, the departmental store, are to build a 31,000 sq. ft. extension to their warehouse in Fife-rd.

LEATHERHEAD.—UDC propose aged persons' accommodation at the rear of the Council offices. Architect: P. Badcock, Fairmile-la., Cobham. . . . Cameron Lane Development Co. Ltd. propose erection of 33 houses at Oaken Coppice, Park-la., Ashtead.

LONDONDERRY. — The Corporation's Housing Sub-committee have approved preliminary plans for 54 dwellings in the Osborne-st./Cross-st. clearance area. The scheme will involve the demolition of 28 existing houses.

MANCHESTER.—The Senate, Manchester University, propose conversion of house into Hall of Residence at Ford-la., Didsbury. . . . J. Sniechowski proposes erection of 33 flats/10 garages at Daisy Bank-rd., Victoria Park. . . . Commercial & General Investments Ltd. propose erection of shop after demolition of existing property at Palatine-rd., Northenden. . . . The Quickmix Concrete Co. Ltd. propose erection of readymix concrete plant at Crabtree-la., Clayton. . . . Joshua Tetley & Son Ltd. propose rebuilding the 'Ram Inn,' Oldham-rd., Collyhurst.

MIDDLESBROUGH.—Layout plans have been approved for the erection of 100 houses on the Acklam-rd. estate (phase 1), and roads and sewers for phase 2 for Wimpey & Co. Ltd., Cargo Fleet-la., Middlesbrough.

MILFORD-ON-SEA (Hants.). — County Planning Com. is to consider outline applications for erection of 59 flats and 67 garages on site of Solent Court Hotel, Cliff-rd.; and 33 flats and 38 garages at Sea Pines, almost adjacent to the hotel.

NEWBURY.—Trust Houses Ltd. propose alterations and additions to the Chequers Hotel. Plans by own architects.

NORTHERN IRELAND.—The Housing Trust, 12 Hope-st., Belfast 12, propose to acquire 360 acres of land at Dundonald for housing purposes.

NOTTINGHAM.—A new £¾m. building is planned by the Mechanics Institution of Nottingham, formed 123 years ago. It is planned to demolish its present premises and erect the new building, designed by Fitzroy Robinson & Ptnrs., London. Incorporated are shops on the ground floor, and lecture halls, libraries, offices, a restaurant and recreation rooms above. Tenders are to be called for shortly.

OLDHAM.—Manchester Diocesan Board of Finance propose erection of new St. Martin's prim. sch.

ORMSKIRK.—The Country & New Town Properties Co. Ltd., Luton, propose conversion of 'The Kings Arms Hotel,' Moor-st., into shopping centre.

OXFORD.—James Clark & Eaton Ltd. propose new depot. Est. £50,000. . . . Following for Regional Hospital Bd.: Chronic sick accommodation at Neithrop Hospital, £20,050 est.; alterations to the Nightingale Ward and laboratory extension and new CSSD department at Kettering General Hospital; rebuilding of theatre at the Northampton General Hospital; balcony enclosure at the Nuffield Ward and gymnasium at the Royal Berkshire Hospital; nurses' training school at Savernake; nurses' home at Marlborough Children's Hospital; industrial rehabilitation unit at River Mead Hospital; conversion of 181 Woodstock-rd., Littlemore, to form day hospital; stage 3 of accommodation for mental patients at Longworth Hospital; appointed Ballard & Beese, 34 St. Giles, Oxford, as architects for alterations to the Southdale Ward at Winslow Hospital; Stevens, Flavel & Beard, 21 Turl-st., Oxford,

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as architects for an annexe at Littlemore Hospital; Gotch, Saunders & Surridge, High-st., Kettering, as architects for extension to St. Luke's and St. Crispin Wards at Kettering General Hospital.

RAMSBOTTOM.—UDC propose residential development at Marklands-pl. area/Nuttall-la. district/Acre Meadow site, Edenfield.

READING.—Mrs. M. Wellbelove proposes a 3-storey block of 12 flats and 10 garages at 124 Hamilton-rd. Architect: F. G. Sainsbury.

RHYL.—Church Auth. propose erection of new St. Anne's Church on site of existing church.

SALFORD.—Detailed planning is to start early next year on the proposed new building for the Manchester Guardian and Evening News Ltd. The company intends to move from its present headquarters in Cross-st., Manchester, to a site fronting on to New Bailey-st., Salford, which is bounded on one side by the Irwell. The scheme—by Harry S. Fairhurst & Son, Manchester architects—includes a multi-storey block of offices for the editorial, advertising and administrative offices of the *Guardian* and the *Manchester Evening News*, and a 3- or 4-storey building for the typesetting and printing machinery, storing newsprint, and the packing and distribution departments. This L-shaped building, adjoining the tower block, will be about 60 ft. high. The new buildings and machinery would cost more than £2 millions. Approval for the outline plan has already been given by Salford Corpn.

SALFORD.—The following appointments have been made by the City C in respect of various development work: Adaptations to Wellington-st. senior sch.; R. Byrom, architect. Bury New-rd. development; Cruickshank & Seward, architects. Sussex-st. flats; Cruickshank & Seward, architects. Extensions to West and North Salford youth clubs; Taylor & Young, architects. Extensions to North Salford sec. mod. sch.; Halliday & Agate, architects. New church accommodation at 'The Homestead'; W. C. Hattrell & Ptnrs., architects. New purpose-built reception centre; W. C. Hattrell & Ptnrs., architects. Extensions to Tootal-rd. cty. sec. sch.; Halliday & Agate, architects. Adaptations to Barr Hill open-air sch.; Richard Byrom, architect.

SALISBURY.—Messrs. Arrows Ltd. propose new supermarket nr. junction of Bishopdown/Barrington-roads, Bishopdown estate.

SEDGELEY.—Five Oaks Estates Ltd., Coseley, propose residential development at Guy's-la., Lower Gornal. . . . K. E. Millard & Co. Ltd., Wolverhampton, propose erection of 62 dwellings at Sandyfields. . . . The Old Peoples' Housing Soc. Ltd. propose extensions at Neville-hse., Priory-la.

SHEFFIELD.—Kerry's (Gt. Britain) Ltd. propose erection of new offices/showrooms/warehouse at St. Mary's Gate.

SKEGNESS.—Stiebel & Co. Ltd., Nottingham lace and net manufacturers are to build a new £40,000 factory here.

SLOUGH.—LCC propose erection of 78 dwellings and 69 garages at the Langley estate. Est. £194,360. . . . Wates Ltd., London, SW16, propose erection of 108 houses off Turner-rd.

STANLEY.—UDC has decided to go ahead with its £189,000 scheme for new swimming baths at Kings Head field. Architects are Kitching & Co., 21 Albert-rd., Middlesbrough.

STAVELEY.—UDC propose erection of 80 dwellings at Middlecroft estate.

STOCKTON-ON-TEES.—J. Robinson & Co., Houndgate, Stockton, are to erect a 2-storey warehouse in Brunswick-st. and William-st., Stockton. . . . W. Southgate Ltd., West-row, Stockton, are to erect fruit warehouse in Brunswick-st. and York-st. . . . Metallisation Ltd., Portrack-la. industrial estate, Stockton, are to extend workshops.

SUNDERLAND.—The Regent Cinema, Grangetown, is to be closed on June 3 and will be converted into shops by Ceres Investments Ltd. Architects: S. John Hill & Ptnrs., 2 Whitfield-st., Gloucester.

SURREY.—EC propose expenditure of £3,300,000 on school buildings in 1963-64 programme.

WHYTELEAFE.—A. T. Chown & Co. Ltd. proposed new offices at Godstone-rd.

WIGAN.—M. J. Harris proposes residential development at Lancaster-la., Parbold. . . . William Finch (Appley Bridge) Ltd. propose erection of new factory at Skull House-la., Appley Bridge. . . . Magee, Marshall & Co. Ltd. propose erection of licensed premises at junction of Sherwood-cres./Montrose-ave. . . . Peter Walker (Warrington) Ltd. propose erection of licensed premises at junction of Norley Hall-ave./Severn-dr.

WIGAN.—Magee, Marshall & Co. Ltd., Blackburn brewers, are to build a new PH at Worsley Hall housing estate. . . . Peter Walker (Warrington) Ltd., Warrington brewers, are to build a new PH on the Norley Hall housing estate.

WIGTON.—RDC propose erection of 80 dwellings during 1961-62.

WILMSLOW.—The Wilmslow Hotel Development Co. Ltd. received planning approval for erection of an 11-storey luxury hotel/4-storey club for BEA Silver Wings' Club/6 shops/tennis courts/car park. Est. £800,000.

WINDSOR.—James Minter & Ptnrs. Ltd., 7 Suffolk-st., London, SW1, propose multi-storey block of flats, swimming pool and tennis courts at St. Leonard's Hill.

TENDERS

(A) Denotes *accepted*.
(PA) Denotes *provisionally accepted*.
(RA) Denotes *recommended for acceptance*.
(AM) Denotes *accepted subject to modification*.
(GD) Denotes *accepted subject to approval by appropriate Government Department*.

AYCLIFFE (Co. Durham).—Construction of roads and sewers in precinct D3, Newton Aycliffe for Newton Aycliffe Development Corporation. (A) Direct labour.

BILLINGHAM-ON-TEES.—Erection of an office block for the Furness Shipbuilding Co. Ltd. Plans by T. F. Burns and Partners, constg. engrs., 3 Ellison-pl., Newcastle-on-Tyne. (A) Brims & Co. Ltd., Pandon Buildings, City-rd., Newcastle-on-Tyne.

BIRKENHEAD.—New offices at Price-st. for Ajama Chemical Co. Ltd. (A) Tersons Ltd., London.

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BIRMINGHAM.—New community centre at Nechells Green for City C. Architect: A. G. Sheppard Fidler (City A). (A) Wates Ltd., £53,983.

BLACKBURN.—Baths extensions at Belper-st. for BC. (A) James Whittaker & Sons (Blackburn) Ltd.

BOLTON.—Rebuilding premises at Deansgate for Bolton Co-operative Soc. Ltd. (A) John Dickinson & Co. (Bolton) Ltd.

BUCKS.—Following for CC: Erection of aged persons' home at Rickley-la., Bletchley. (A) Winton Heyes Ltd. Phase 1 of county prim. sch. at Iver Heath. (A) Halfacre & Young Ltd., Maidenhead.

CANTERBURY.—Erection of a multi-storey departmental store at St. George's-la. Architects: Sir John Burnet, Tait, Wilson & Ptnrs. (A) R. Costain Ltd., London, SE1.

DEWSBURY.—Five blocks at Thornhill Lees and five blocks of flats at Westown for BC. (A) Fell Construction Co. Ltd., Wakefield.

DURHAM.—Erection of new headquarters at Old Elvet for the Territorial Army and Air Forces Association. Architects: Newrick and Blackbell, 58 John-st., Sunderland. (A) Isaac Berriman, Co. Durham.

EPPING & ONGAR.—Erection of 31 dwellings at Shelley, Ongar, Essex, for RDC. E&S is R. L. Luck. Quantities by Andrew Roberts. (A) Coward (Contractors) Ltd., 101 Lower Anchor-st., Chelmsford, £46,027.

ESHER.—Erection of 14 dwellings and 31 garages at Upper Farm estate, West Molesey, for UDC. (A) F. H. Norris, 11 Dorking-rd., Great Bookham, £30,569.

GUILDFORD.—Erection of 9 3-storey blocks of 6 flats at St. Margarets, London-rd., for Croucher & Croucher Ltd., Weybridge. (A) Direct labour. Extensions to the Municipal offices for BC. (A) H. Ashenden Ltd., Guildford, £26,400.

HEANOR.—Erection of Loscoe welfare centre for UDC. (A) V. C. Bamford, Ripley.

LIVERPOOL.—Single-storey tyre depot at Foster-st. for Avon India Rubber Co. Ltd. (A) Wm. Tomkinson & Sons Ltd.

(GD) LONDON (Admiralty).—Particulars of contracts over £4,000 in value: *Northern Ireland:* Construction of silencing pen; R. J. Campbell (Belfast) Ltd., Belfast 4. *Kent:* Supply and erection of prefabricated building; S.I. Buildings Ltd., Oxford. *Morayshire:* New school; Alexander Hall & Son (Builders) Ltd., Aberdeen.

(GD) LONDON (Air Ministry).—Contracts to the value of £4,000 or over for weeks ended May 19 and 26: *Building work:* Gaydon, Warwicks.; Bosworth Wakeford & Stepnell Ltd., Rugby, Warwicks. Scampton, Lincs.; A. Richmond & Sons Ltd., Retford, Notts. Innsworth, Glos.; John Laing (Construction) Ltd., Bristol. Marham, Norfolk; Walter Lawrence & Son Ltd., Swaffham, Norfolk. Ely, Cambs.; J. Jarvis & Sons Ltd., Vauxhall Bridge-rd., London, SW1. *Civil engineering work:* Thorney Island, Hants.; Keith Andrew & Co. Ltd., Worthing, Sussex. Aden; The Middle East Contracting Co. Ltd., Maalla, PO Box 1230, Aden. *Building & civil engineering work:* Benson, Oxford; Lewis & Watters Ltd., Leamington Spa. *Runway work:* Honington, Suffolk; W. & J. Glossop Ltd., Wandsworth, London, SW18. *Construction of apron taxiways, etc.:* London (Heathrow) Airport, Middx.; George Wimpey & Co. Ltd., Hammersmith Grove, London, W6. *Artificers' work:* Lindholme (Yorks) etc.; G. Chessman Ltd., Scunthorpe, Lincs. West Ruislip (Middx.) etc. and Uxbridge, Middx.; Haymills (Contractors) Ltd., Western-av., London, W5. Rhoose Airport, Glamorgan; H. S. Rendell & Sons Ltd., Barry, Glamorgan. Cardington (Beds.) etc.; M. & F. O. Foster & Co. Ltd., Hitchin, Herts. Debden, Essex; L. W. Free, Esq., FCA, Receiver & Manager for S. Cronin & Sons Ltd., 192 Warley Hill, Brentwood, Essex. St. Athan (Glam.), etc.; Building & Construction Co. Ltd., Park-pl., Cardiff. Brampton Park, Hunts.; Tooley & Youngs Ltd., Stalham, Norwich, Norfolk. Binbrook (Lincs.), etc.; Humberstone & Pulford (Builders) Ltd., Louth, Lincs. *Painting work:* Welford, Berks.; F. G. Ilbury & Co. Ltd., Harlington, Hayes, Middx. Louth, Lincs.; Donald Humberstone & Co. Ltd., Louth, Lincs. *Installation work (boiler*

etc.): Biggin Hill, Kent; Richard Whittington & Co. Ltd., Gloucester-pl., London, W1.

(GD) LONDON (Metropolitan Police).—Recent contracts placed: Conversion (for Probation Offices) at 350 Old-st., EC1; J. H. & W. Heal Ltd., £4,365. Internal redecorations to 54 houses at Abbotshall-ave., Morton-way and Waterfall-rd., N14; J. H. & W. Heal Ltd., £6,042.

(GD) LONDON (MoW).—Contracts placed for week ended May 13: *Essex:* Erection of automatic telephone exchange, Halstead; J. Moss & Son Ltd., St. Helena-rd., Colchester. *Glamorganshire:* Extension to Government Offices, Ty Glas-rd., Llanishen; S. N. Addicott Ltd., 65a Station-rd., Llandaff North, Cardiff. *Lancashire:* Reinstatement of temporary housing site at south recreational ground, Bootle; County Boro' of Bootle, Town Hall, Bootle. *London:* Electrical work at Royal Agricultural Hall, Islington, N1; Agate Electrical Engineers Ltd., 42 High-st., Colliers Wood, SW9. Erection of a 'Seco' hut at Lambeth County Court, SE11; Selection Construction Co. Ltd., 26 Margaret-st., W1. *Midlothian:* Cleaning of stonework at Royal Scottish Academy, The Mound, Edinburgh; Wm. Arnott McLeod & Co. Ltd., Russell-rd., Edinburgh, 11. *Somerset:* Extension to telephone exchange, Frome; G. Mannings & Sons, 2 Wood-st., Bath. *Surrey:* New swine fever compound at Ministry of Agriculture, Fishery & Food, Weybridge; E. P. Wickens & Sons Ltd., 93 Eastworth-rd., Chertsey. Extension to Lodge Hill telephone exchange, Addington, nr. Croydon; Grace & Marsh Ltd., New Bridge-wks., Waddon, Croydon. *Sussex:* Erection of telephone exchange, Billingshurst; C. Wadey & Sons Ltd., Parbrook, Billingshurst. *Yorkshire:* Recover roof surfaces at airfield, Pollington; Evode Ltd., Common-rd., Stafford.

MAIDENHEAD.—Erection of Cox Green prim. sch. for Berks. CC. (A) J. M. Jones & Sons Ltd., Maidenhead, £73,000 (approx.).

MANCHESTER.—New factory at Nash-rd. works, Trafford Park, for Victor Blagden (Manchester) Ltd. (A) Lowton Construction Co. Ltd., Lowton.

MIDDLETON (Lancs.).—Erection of 100 houses at Hollin for BC. (A) H. Daniels & Sons Ltd.

NEWPORT.—Extensions at Arthur Adams Agricultural College for Salop CC. (A) Turriff Construction Corporation.

NORTHERN IRELAND.—Second extension of Coolkeeragh Power Station, main civil works, for Electricity Board. (A) Tileman & Co. Ltd., Romney House, Tufton-st., London, SW1. Est. £100,000.

NORWICH.—New sports hall and youth club at St. Giles-st. for the YMCA. Architect: D. Mawson, of Field & Mawson. (A) Ford & Carter Ltd., £23,797.

NOTTINGHAM.—Improvements to children's hospital for Sheffield Regional Hospital Bd. (A) Allcock & Sisson Ltd. New service station at Castle Boulevard for Regent Oil Co. Ltd. (A) W. J. Roberts (Bottesford) Ltd.

ORMSKIRK.—Erection of 34 dwellings at Queen-st. area for UDC (A) J. & R. Woods (Builders) Ltd.

REDHILL (Surrey).—New county sec. boys' sch. for CC. Architects: J. Leathart & Son. Quantity surveyors: Clevely & Sons. (A) Y. J. Lovell (Sussex) Ltd., £238,287.

SHREWSBURY.—Erection of 80 sd houses for sale at Harlescott Grange estate, for BC. (A) Selleck, Nicholls & Co. Ltd., St. Austell, Cornwall.

SOUTHAMPTON.—Extensions to Hall of Residence (Glen Eyre) for Southampton University. (A) Jenkins & Sons Ltd., £138,000.

SOUTHEND-ON-SEA.—Extension to Municipal Airport for Corpn. (A) Henry Boot & Sons (Civil Engineering) Ltd., Sheffield 11, £163,500.

SOUTHPORT.—Extensions to Floral Hall for BC (A) Thomas Southworth & Sons Ltd., £26,661.

SUNDERLAND.—Additions at Ocean-rd., Grangetown, for Hendon Paper Works Ltd. Architects: Newrick and Blackbell, 58 John-st., Sunderland. (A) Dowsett Engineering Contractors Ltd., Low Fell, Gateshead. Erection of first stage of new engineering factory for Hepworth and Grandage Ltd., Bradford. Architects: Newrick and Blackbell, 58 John-st., Sunderland. (A) George Wimpey & Co. Ltd., Orchard-hse., Fenwick-terr., Newcastle-on-Tyne.

SURBITON.—Erection of 12 aged persons' dwellings at 14 South-pl. for BC. (A) Pinsent Bros. Ltd., Beaconsfield-rd., Tolworth, Surbiton, £22,229.

SUSSEX.—New factory at Burgess Hill for Deri (Engineers) Ltd. Architects: Theo. H. Birks, QS: K. R. Kensal. (A) Y. J. Lovell (Sussex) Ltd., £91,400.

SWINDON.—Supply and erection of buildings at Savernake-st. for BC. (A) Pratten & Co. Ltd., Bath.

WESTMINSTER.—Erection of a 10-storey office block with basement at Warwick-row, SW1, for City of London Real Property Co. Architects: W. H. Rogers with company's architect's dept. (A) Myton Ltd., £300,000.

WIMBLEDON.—Erection of a 7-storey block of offices, with ground floor shops and basement car park, on site of Odeon Cinema for Rank Property Development Ltd. Architects: Fitzroy Robinson & Ptnrs. (A) R Costain Ltd., London, SE1.

WINDSOR.—Modernisation and extensions at Clewer Green county prim. sch. for CC. (A) W. Varney Ltd., 13 Clewer Hill-rd., Windsor, £25,000.

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OFFICIAL ANNOUNCEMENTS

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ATTENTION ADVERTISERS

Classified advertisements in this section can be accepted up to 12 o'clock noon on the TUESDAY prior to issue. It is regretted that advertisements cannot be accepted by telephone.

CONTRACTS

BRENTFORD AND CHISWICK
BOROUGH.

INTERNAL AND EXTERNAL RE-DECORATION OF EAST WING AT CHISWICK COUNTY GIRLS' SCHOOL.

TENDERS are invited for the INTERNAL AND EXTERNAL RE-DECORATION OF THE EAST WING at Chiswick County Girls' School.

Documents can be obtained from The Borough Engineer, Town Hall, Chiswick, W.4, and are to be returned to me not later than 9.30 a.m. on FRIDAY, 16th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any tender.

W. F. J. CHURCH,
Town Clerk.

HALIFAX
COUNTY BOROUGH.

WHITEHILL COUNTY PRIMARY SCHOOL.

During the school holidays from 7th JULY to 27th AUGUST it is proposed to CARRY OUT REMEDIAL WORK TO THE REINFORCED CONCRETE ROOF at the above named school. The work consists of propping, cutting and then forming expansion joints in the existing roof to a specification and details prepared by Messrs. Husband & Co., Consulting Engineers of Sheffield.

Will firms desirous of submitting a tender for this work please apply, in writing, within seven days of the publication of this advertisement to the Borough Engineer, Crossley-street, Halifax, who will forward tender documents.

ABINGDON
BOROUGH.

10 SINGLE-BEDROOM TRADITIONAL DWELLINGS, GAINSBOROUGH GREEN, PHASE III—PART A.

The Council invite FIXED-PRICE TENDERS FOR THE ERECTION OF 10 SINGLE-BEDROOM TRADITIONAL DWELLINGS with ancillary works as part of the third stage of development at Gainsborough Green, Abingdon. Forms of tender and bills of quantities may be obtained on or after the 15th JUNE, 1961, from the Architects, Caren, Roscoe-Hudson and Partners, 6 Station-road, Abingdon, Berks., at whose office the contract drawings may be inspected.

Tenders must be submitted sealed in the envelope provided endorsed "Tender Gainsborough Green, Phase III A" to reach the undersigned not later than 5 p.m. on FRIDAY, 7th JULY, 1961.

The Council are not bound to accept the lowest or any tender.

E. W. J. NICHOLSON,
Town Clerk.

The Abbey House,
Abingdon.
26th May, 1961.

CHESTER
COUNTY.

TENDERS required for the ERECTION OF EXTENSIONS AND ADAPTATIONS TO ELLESMERE PORT, THE GRANGE, SECONDARY MODERN SCHOOL.

(Approximate value £230,000.)

Drawings may be seen at this Office.

Applications for Bills of Quantities, accompanied by a remittance of two guineas, made payable to the Cheshire County Council and crossed "Westminster Bank Limited" (which will be returned on receipt of a bona fide Tender), should reach me not later than MONDAY, 5th JUNE, 1961.

Tenders are due by 10 a.m. on TUESDAY, 11th JULY, 1961.

EDGAR TABERNER, A.R.I.B.A.,
County Architect.

County Hall,
Chester.

EASTBOURNE
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.

TENDERS are invited for the execution of the undermentioned proposals :—

1. *Land adjoining Green-street Farm Cottages :*

The ERECTION OF THREE TWO-STOREY BLOCKS, EACH CONTAINING FOUR ONE-BEDROOM FLATS.

Tendering documents will be issued on 19th June, 1961.

Date for receipt of Tenders : 10th JULY, 1961.

2. *Land East of Port-road—Section 1 :*

The ERECTION OF 68 HOUSES, EIGHT FLATS IN TWO TWO-STOREY BLOCKS, AND 16 GARAGES.

Tendering documents will be issued on 21st July, 1961.

Date for receipt of Tenders : 14th AUGUST, 1961.

Applications for Tendering documents must be delivered to the Borough Surveyor, 2 and 4 Saffrons-road, Eastbourne, on or before the 16th JUNE, 1961, and must be accompanied by a deposit cheque for £2 2s. 0d., made payable to the Eastbourne Corporation.

No Tender will be considered unless sent in a plain sealed envelope, addressed to the undersigned, bearing the words "Tender for 12 flats" or "Tender for Housing, Section 1, on land East of Port-road" as the case may be, but devoid of any name or mark indicating the sender, and delivered not later than 12 NOON on the date stated above for the receipt of Tenders. The lowest or any Tender will not necessarily be accepted.

F. H. BUSBY,
Town Clerk.

Town Hall,
Eastbourne.
25th May, 1961.

SAFFRON WALDEN
RURAL DISTRICT COUNCIL.

ERECTION OF SIX BUNGALOWS AT ELMDON, ESSEX.

TENDERS are invited for the ERECTION OF SIX BUNGALOWS and works in connection therewith at Elmdon, Essex.

Bills of Quantities and Forms of Tender can be obtained from the Clerk of the Council, Council Offices, Debden-road, Saffron Walden, Essex.

The Council do not bind themselves to accept the lowest or any Tender.

Tenders suitably endorsed must reach the undersigned not later than SATURDAY, 24th JUNE, 1961.

A. W. OVERALL,
Clerk of the Council.

23rd May, 1961.

WOOD GREEN
BOROUGH.

RECONSTRUCTION OF CHIMNEY STACKS.

The Council invite TENDERS for REBUILDING, REPOINTING, ETC., CHIMNEY STACKS on the White Hart-lane Estate.

Forms of Tender, specification, etc., may be obtained on application to the Borough Engineer at the address below.

Tenders in plain sealed envelopes endorsed "Tender for Chimney Stacks," but bearing no name or mark indicating the sender must be delivered to the undersigned by NOON on the 15th JUNE, 1961.

G. W. PLATER,
Town Clerk.

Town Hall,
Wood Green, N.22.
23rd May, 1961.

SWANSEA
COUNTY BOROUGH.

LOCAL EDUCATION AUTHORITY. TO BUILDERS.

TENDERS are invited for the ERECTION OF FOUR SCHOOL CARETAKER'S HOUSES, two of which are at Fairwood-road, West Cross, one at Portmead and one at Blaen y Maes.

Builders should indicate to which house or houses they wish to tender.

Drawings of the Works and General Conditions of Contract may be inspected at the office of the Borough Architect, The Guildhall, Swansea.

Builders desiring to tender must deposit the sum of five pounds with the Borough Architect on or before 16th JUNE, 1961.

Bills of Quantities will only be issued to those builders who make the said deposit. The deposit will be refunded after delivery of a bona fide Tender (not subsequently withdrawn) and the return of all documents.

Tenders must be delivered to me on or before the date stated in the Form of Tender and in accordance with the direction issued.

No guarantee is given that the lowest or any other Tender will be accepted.

IORWERTH J. WATKINS,
Town Clerk.

The Guildhall,
Swansea.
29th May, 1961.

SMETHWICK
COUNTY BOROUGH.

TO BUILDERS AND CONTRACTORS.

PERRY HILL, OLD PEOPLE'S FLATS.

The Housing Committee invite TENDERS for the ERECTION OF 21 OLD PEOPLE'S FLATS IN 3-STOREY CONSTRUCTION at Perry Hill, Oldbury.

Applications for bills of quantities should be made in writing to the Borough Engineer and Surveyor, Council House, Smethwick, by 7th JUNE, 1961, accompanied by a crossed cheque for £2 2s. made payable to the "Borough Treasurer, Smethwick." The amount will be refunded following receipt of a bona fide tender. Bills of quantities will be forwarded on or about the 14th JUNE, 1961, and tenders on the form provided and enclosed in the official envelope must be delivered to the Town Clerk not later than 10 a.m. on MONDAY, 10th JULY, 1961.

The Corporation is not bound to accept the lowest or any tender.

E. L. TWYCROSS,
Town Clerk.

Council House,
Smethwick, 40.

BRISTOL
CITY AND COUNTY.

SNOWDON-ROAD HOME, FISHPONDS, BRISTOL.

The Welfare Services Committee invite TENDERS FOR INTERNAL RE-DECORATIONS AND ALTERATIONS at the above. Contractors willing to submit Fixed Price Tender apply to City Estates Surveyor and Valuer, The Exchange, Corn-street, Bristol, 1, by 9th JUNE, 1961.

H. H. MOORE, F.R.I.C.S., F.A.I.,
City Estates Surveyor and Valuer.

The Exchange,
Corn-street,
Bristol, 1.

WATFORD
BOROUGH.

ELDERLY PERSONS' FLATS.

TENDERS are invited for the CONSTRUCTION OF 19 BEDSITTING ROOM FLATS AND ONE TWO-BEDROOM FLAT IN ONE THREE-STOREY BLOCK at the junction of Hagden-lane and Brightwell-road, Watford.

Applications for documents must be made to Mr. F. C. Sage, Borough Engineer and Surveyor, Town Hall, Watford, not later than 2 p.m. on MONDAY, 29th MAY, 1961.

Contract documents will be forwarded as soon as possible after that date.

No Tender will be considered unless upon the official form which must be sent to the undersigned in the envelope provided for the purpose by 2 p.m. on WEDNESDAY, 5th JULY, 1961.

GORDON H. HALL,
Town Clerk.

Town Hall,
Watford.
April, 1961.

WYCOMBE
RURAL DISTRICT COUNCIL.

SINGLE BEDROOM AND BED-SITTING ROOM FLATS ON SITES IN PRINCES RISBOROUGH, WOOBURN, AND BOURNE END.

Contractors wishing to TENDER for the ABOVE HOUSING DEVELOPMENT COMPRISING ABOUT 100 UNITS OF ACCOMMODATION, should submit their names to the Engineer and Surveyor, 8-9 Easton-street, High Wycombe not later than 12th JUNE, 1961.

Tenders will be invited from a list of selected Contractors in three to four months' time.

The Contract documents for a fixed price contract will consist of plans, specification, form of Tender and conditions of contract of the R.I.B.A. form without quantities.

L. C. RYSDALE,
Clerk of the Council.

17 High-street,
High Wycombe.

WEST SUSSEX
COUNTY COUNCIL.

Contractors wishing to submit a TENDER for the undermentioned project, are invited to apply for permission to tender ; such applications to be addressed to the County Architect, County Hall, Chichester, to reach him not later than 16th JUNE, 1961.

NEW HALL, STAFFROOM, ETC., AT THOMAS BENNETT SCHOOL, CRAWLEY (Job No. 6844).

Quantities will be issued on or about 10th August, 1961.

The County Council does not bind itself to accept the lowest or any Tender, and the firm whose Tender is accepted must be prepared to enter into a contract in a form to be prepared by me.

T. C. HAYWARD,
Clerk of the County Council.

County Hall,
Chichester.

CHATHAM
BOROUGH.

ORDNANCE-STREET REDEVELOPMENT AREA.

TENDERS are invited for the ERECTION of the following :—

(a) A BLOCK OF 19 MAISONETTES in Ordnance-street ;

(b) A BLOCK OF 12 FLATS in Perry-street.

Contractors are given the option of submitting either fixed price Tenders or Tenders including cost variations clauses for labour and materials.

Bills of Quantities and drawings will be available on 7th June, 1961.

Contractors wishing to tender should apply in writing to Mr. J. A. T. Richards, Borough Engineer and Surveyor, Town Hall, Chatham, enclosing a deposit of two guineas, which will be returned on receipt of a bona fide Tender.

Tenders to be delivered to the above not later than 12 NOON on MONDAY, 17th JULY, 1961.

The Council does not bind itself to accept the lowest or any Tender.

ROWLAND NEWNES,
Town Clerk.

Town Hall,
Chatham.

SLOUGH
BOROUGH.

238 HOUSES,
PARLAUNT PARK, LANGLEY.

TENDERS are invited for the SUPPLY AND/OR FIXING of the following items :—

1. PRECAST CONCRETE THRESHOLDS, CHIMNEY CAPS AND CILLS.
2. IRONMONGERY.
3. METAL WINDOWS (HOT DIPPED GALVANISED).
4. TILED SURROUNDS AND HEARTHS.
5. HOT WATER APPLIANCES AND SANITARY WARE.
6. INTERNAL DOORS (STRAMIT CORE) AND EXTERNAL DOORS.
7. ELECTRICAL INSTALLATIONS.
8. FENCING, GATES AND CLOTH'S POSTS.
9. ACCOTILE THERMOPLASTIC FLOORING.

Items 1 to 6 (inclusive) are supply only and Items 7 to 9 (inclusive) are supply and fix.

Suppliers and Contractors who wish to submit Tenders for each or all of the items should inform the Borough Engineer, Town Hall, Slough, by not later than 16th JUNE, 1961, who will subsequently supply forms of tender and specifications. Applicants must state clearly the item(s) for which they wish to tender.

BOURNEMOUTH
COUNTY BOOUGH.

TO ROOFING CONTRACTORS.

TENDERS are invited, on a FIXED PRICE BASIS, for ROOF TILING SUB-CONTRACT WORK for Contract K.24A, Kinson Estate (R.I.B.A. form of Contract).

Firms wishing to tender should make application to the Borough Architect, Room 106, Town Hall, Bournemouth, not later than SATURDAY, 10th JUNE, 1961.

A. LINDSAY CLEGG,
Town Clerk.

KETTERING
BOROUGH.

WEEKLEY GLEBE PLAYING FIELD. SPORTS PAVILION AND REFRESHMENT ROOMS.

FIXED PRICE TENDERS are invited for the ERECTION AND COMPLETION IN PERMANENT MATERIALS OF THE ABOVE SPORTS PAVILION, which contains the following accommodation :—

5 DOUBLE CHANGING ROOMS
1 OFFICIALS' CHANGING ROOM
SHOWERS
WASHROOM AND TOILET
REFRESHMENT ROOM
STORES AND BOILER HOUSE.

making a total of 4,200 feet super.

Forms of Tender and Bills of Quantities may be obtained from and plans inspected at the Office of the Borough Engineer and Surveyor, 3 Gold-street, Kettering.

A deposit of two guineas is required which will be refunded upon receipt of a bona fide Tender and the return of all documents.

Tenders, enclosed in a plain sealed envelope endorsed "Sports Pavilion, Weekley Glebe," are to be returned to the undersigned not later than 12 NOON, MONDAY, 19th JUNE, 1961.

The Corporation do not bind themselves to accept the lowest or any Tender.

D. DUNSFORD PRICE,
Town Clerk.

Town Clerk's Office,
Huxloe-place,
Kettering,
Northants.
18th May, 1961.

BASINGSTOKE
BOROUGH.

SOUTH HAM ESTATE,
BASINGSTOKE.

TENDERS are invited for the ERECTION OF A TOTAL OF 413 DWELLINGS COMPRISING TWO- AND THREE-STOREY FLATS, HOUSES AND BUNGALOWS, ALSO 264 GARAGES. The scheme is situated on one site where main roads and sewers are now under construction, but included in the contract will be ANCILLARY SERVICE ROADS AND FOOTPATH WORKS.

Forms of Tender, Bills of Quantities and General Conditions of Contract may be obtained from the Borough Architect, Eric Almond, Dipl.Arch., A.R.I.B.A., Municipal Buildings, Basingstoke, on payment of a deposit of £3 3s. which will be returned on receipt of a bona fide Tender.

Tenders are to be returned to the undersigned by NOON on TUESDAY, 27th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

R. J. PURVIS,
Town Clerk.

NEWCASTLE
REGIONAL HOSPITAL BOARD.

NEWCASTLE GENERAL HOSPITAL.

The Board proposes to invite TENDERS FOR THE COMPLETION OF A NEW BOILER HOUSE at the above Hospital. The steel frame of the building is being erected under a separate contract and the present work will comprise concrete casing of steelwork, cladding in part with 11 in. cavity brick walls and in part with patent glazing and insulated aluminium sheeting. The roof will be covered with metal decking. The total floor area of the building is approximately 7,800 sq. ft.

Tender documents will be ready for issue to Contractors during June, 1961, and it is expected that it will be possible for the building operations to commence in August.

The project has been planned by and will be carried out under the direction of Messrs. Cackett, Burns Dick and MacKellar, Chartered Architects, of 21 Ellison-place, Newcastle upon Tyne, 1, in conjunction with the Regional Engineer, Mr. R. L. Wake, A.M.I.Mech.E.

Contractors wishing to tender for this work are asked to submit their names to the Secretary of the Board, Benfield-road, Newcastle upon Tyne, 6, not later than 9th JUNE, 1961. A limited number of Contractors may be selected and asked to tender, but the lowest or any tender will not necessarily be accepted.

CANTERBURY CITY.

NOTICE TO
BUILDING CONTRACTORS.

The Council invite applications from Building Contractors for inclusion in lists of selected Contractors from whom tenders will be invited during the period ending JUNE, 1962, for contract works on Housing and General works.

The lists will be for contracts within the following values:

BUILDING WORKS:
List (A) between £500 and £5,000.
List (B) between £5,000 and £25,000.
List (C) between £25,000 and £50,000.
PAINTING AND DECORATING:
List (D) up to £500.
List (E) between £500 and £5,000.

Application for inclusion in any or all of these lists must be sent to the undersigned not later than 16th JUNE, 1961. Applications should be accompanied by particulars of works, with contract values, recently completed, together with the name and address of the Architect or Authority concerned.

Selected applicants will be required to sign a statement that, in tendering, restrictive practices in the building industry condemned by the Monopolies Commission will not be followed.

The Council reserves the right to place a Contractor in all or any of the lists or to refuse to include a Contractor in all or any of the lists.

The lists will be reviewed annually.

J. BOYLE,
Town Clerk.

Municipal Buildings,
Canterbury.

ESSEX
COUNTY COUNCIL.

(1) ROCHFORD HAWKWELL HOLT COUNTY JUNIOR SCHOOL.
(2) GROUNDSMAN'S HOUSE AND SPORTS PAVILION AT PLAYING FIELD, WRITTLE.
RE-ADVERTISEMENT.

Contractors wishing to submit FIRM-PRICE TENDERS FOR THE ERECTION of the above should forward their names, from which panels will be chosen and provided with tender documents.

(1) The contract will comprise the construction of foundations, plumbing, drainage, finishings, external works, etc. The buildings will be of prefabricated timber construction and will be supplied and erected by a Sub-Contractor, already nominated, within the contract. The value of the whole contract is £20,000.

(2) Traditional and brick construction and timber framed building, estimated cost £8,000.

Separate applications to reach the undersigned not later than 10th JUNE, 1961.

H. CONOLLY, C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

WEST HARTLEPOOL
COUNTY BOROUGH.

TO FLOORING CONTRACTORS

TENDERS are invited from Flooring Contractors for the SUPPLY AND LAYING OF VYNAL FLOOR FINISHES AT THE HIGH SCHOOL FOR GIRLS, WEST HARTLEPOOL.

Specification and Form of Tender and any other information can be obtained from the Architect, viz., Leonard Auton Esq., Dip. Arch (Dunelm), A.R.I.B.A., Regent Buildings, York-road, West Hartlepool.

Tenders should be submitted in a plain sealed envelope endorsed as directed in the Specification and should be addressed to the Chairman of the Education Committee, Town Clerk's Office, Municipal Buildings, West Hartlepool. The envelope must not bear any name, frank or marking indicating the sender, and should be received at the Town Clerk's Office not later than TUESDAY, 27th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

ERIC J. WAGGOTT,
Town Clerk.

Municipal Buildings,
West Hartlepool.
27th May, 1961.

READING
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.

FIRM-PRICE TENDERS are invited for ALTERATIONS TO THE CLOAK-ROOM, CHANGING ROOMS AND SHOWERS at Reading School. General conditions may be inspected and specifications with drawings and tender forms obtained from the Borough Architect, Town Hall, Reading. Tenders to the Town Clerk, Town Hall, Reading, by noon, MONDAY, 26th JUNE, 1961. No tender considered unless enclosed in the endorsed envelope provided, which shall bear no indication of the sender. The Corporation do not bind themselves to accept the lowest or any tender.

KINGSTON-UPON-THAMES
ROYAL BOROUGH.

ROOF REPAIRS.

TENDERS are invited from Building Contractors for RENEWAL OF THE FLAT ROOF CLADDING AT A 3-STOREY BLOCK OF NINE FLATS in the Borough.

Details from Borough Surveyor, Kingston-upon-Thames, on deposit of £2 2s., returnable on receipt of bona fide tender and all documents.

Tenders, in the envelope provided, to the undersigned by first post on MONDAY, the 19th JUNE, 1961.

The Corporation do not bind themselves to accept the lowest or any tender.

L. V. POWELL,
Town Clerk.

Guildhall,
Kingston-upon-Thames.

LOWESTOFT
BOROUGH.

ERECTION OF
PERMANENT DWELLINGS,
GUNTON ESTATE, LOWESTOFT.

TENDERS are invited for the ERECTION OF 76 NEW DWELLINGS comprising: 27 TWO-BEDROOM, 41 THREE-BEDROOM, AND 8 FOUR-BEDROOM HOUSES, together with outbuildings, and site works.

The work has been divided into TWO Groups of 29 and 47 Houses, and Contractors may tender for the work in either or both Groups.

Form of Tender, and Bills of Quantities may be obtained from the Borough Engineer's Office, 49 High-street, Lowestoft, on or after the 30th MAY, 1961, upon payment of a deposit of Two Guineas, which will be refunded upon the receipt of a bona fide tender, not subsequently withdrawn, and the return of all documents. Drawings and Conditions of Contract may be seen at the above mentioned office.

Tenders must be delivered to the undersigned not later than 12 noon on FRIDAY, 23rd JUNE, 1961. No tender will be accepted unless in a sealed envelope endorsed "Tender—Erection of New Dwellings, Gunton Estate, Lowestoft," and bearing no mark or writing by which the tenderer can be identified.

The Council do not bind themselves to accept the lowest or any tender.

F. B. NUNNEY,
Town Clerk.

Town Hall,
Lowestoft.
26th May, 1961.

STAINES
URBAN DISTRICT COUNCIL.

REPAINTING AND REDECORATING OF THE EXTERNAL ELEVATIONS TO 170 TRADITIONAL DWELLINGS, VIOLA-AVENUE, STANWELL.

FIXED-PRICE TENDERS are invited for the above works. Specification and form of tender can be obtained from the Engineer and Surveyor, 240 London-road, Staines, on payment of a deposit of £2 2s., returnable on receipt of a bona fide tender not subsequently withdrawn.

Sealed tenders in the envelope provided are to be returned to the undersigned not later than 5 p.m. on MONDAY, the 19th JUNE, 1961.

The Council does not bind itself to accept the lowest or any tender.

F. ENTWISTLE,
Clerk of the Council.

BLACKPOOL.

THE NEW ST. CATHERINES R.C. SECONDARY SCHOOL, GARSTANG-ROAD.

Building Contractors wishing to TENDER for the ERECTION OF THE ABOVE SCHOOL for 300 Pupils are requested to forward their applications for Bills of Quantities to Charles E. Jackson, L.R.I.B.A., Chartered Architect and Surveyor, 27 Abercorn-place, Clifton-drive, Blackpool 'Phone 41871.

SUNDERLAND
COUNTY BOROUGH.

TENDERS are invited for the following works at various educational premises:

PAINTING WORKS.
PROVISION OF LINOLEUM TILES, etc.

Particulars and forms of tender may be obtained from the Director of Education, 15 John-street, Sunderland. Sealed tenders endorsed "Tender for . . . . ." (followed by the work and the premises to which it relates) must be addressed to me and received at my Office, Town Hall, not later than WEDNESDAY, 14th JUNE, 1961.

G. S. McINTIRE,
Town Clerk.

GUNNERSBURY
PARK JOINT COMMITTEE.

BUILDERS WORK.
OIL BURNER INSTALLATION.

TENDERS are invited for the builders work in connection with the CONVERSION TO OIL BURNERS at the Farm Dressing Rooms and Treble Span Greenhouse and specification of work can be obtained from the Borough Engineer, Town Hall, Acton, W.3, and are to be returned to the Clerk and Superintendent, Gunnersbury Park, W.3, not later than 12 noon, FRIDAY, 22nd JUNE, 1961. Work to be carried on during the summer period.

MALDON
RURAL DISTRICT COUNCIL.

ERECTION OF BUNGALOWS.

FIRM-PRICE TENDERS are invited for the following works:

(a) ERECTION OF 1 BLOCK OF 7 ONE-BEDROOM AND 1 TWO-BEDROOM BUNGALOWS at Marsh-road, Tillingham.

(b) ERECTION OF 1 BLOCK OF 7 ONE-BEDROOM AND 1 TWO-BEDROOM BUNGALOWS at Bradwell Waterside.

Plans, Specifications and form of Tender may be obtained from the Engineer and Surveyor, Council Offices, Wantz-road, Maldon, on payment of a deposit of £2, which will be refunded on receipt of bona fide tenders not subsequently withdrawn.

Tenders in envelopes provided for either or both of the works to be returned to reach the undersigned not later than MONDAY, 17th JULY, 1961.

The Council does not bind itself to accept the lowest or any tender.

L. H. HISCOTT,
Clerk of the Council.

Council Offices,
Wantz-road,
Maldon,
Essex.
26th May, 1961.

PUBLIC APPOINTMENTS

EASTERN ELECTRICITY BOARD.

AREA HEADQUARTERS.
TWO ASSISTANT ARCHITECTS.

Applications are invited for the appointment of TWO ASSISTANT ARCHITECTS in the Architect's Section at Area Headquarters, Wherstead, Ipswich.

The work is principally concerned with the design and construction of showrooms and offices.

The salary for each of these posts will be that of a Fourth Assistant Engineer within the range £935-£1,245 in accordance with the N.J.B. Agreement, Schedule B, Class BX, Grade 10.

Apply by letter, stating age, education, qualifications and experience to the Chief Engineer, Eastern Electricity Board, P.O. Box 40, Wherstead, Ipswich, by 22nd JUNE, 1961.

TORQUAY
BOROUGH.

APPOINTMENT OF ASSISTANT
BUILDING INSPECTOR.

Applications are invited for the post of ASSISTANT BUILDING INSPECTOR on Grade A.P.T. I-II (£610-£880).

Applicants should have a knowledge of building construction and plans. Housing accommodation may be available. Removal expenses paid if appropriate. Car allowance.

The appointment is subject to the passing of a medical examination, to one month's notice on either side, to the Local Government Superannuation Acts and to the National Scheme of Conditions of Service.

Applications, giving particulars of age, qualifications and experience, together with the names of two referees, should be sent to the Borough Engineer, Town Hall, Torquay, not later than FRIDAY, 9th JUNE, 1961.

T. ELVED WILLIAMS,
Town Clerk.

Town Hall,
Torquay.

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

OFFICE OF THE
COUNTY ARCHITECT.

Applications are invited for the following appointment in the Doncaster Divisional Office at Adwick-le-Street.

ARCHITECTURAL ASSISTANT or BUILDING SURVEYOR, A.P.T. II. Salary range £815-£960.

Applicants should possess a sound knowledge of building construction and be capable of dealing with maintenance works and adaptations to buildings of various types. Five-day week operated.

Applications to be submitted by the 20th JUNE, 1961, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield Road,
Wakefield.

SHEFFIELD
UNIVERSITY.

Applications are invited for a post of TECHNICAL ASSISTANT on the staff of the Planning Office which offers opportunity for interesting work on the New Building Programme. Applicants should have had some drawing office experience and a background of building subjects. Initial salary dependent on ability and experience within the range £600-£675. Apply, not later than SATURDAY, 17th JUNE, 1961, giving details of age, present and previous appointments, experience and the names and addresses of two referees, to the Bursar, the University, Western Bank, Sheffield, 10.

LONDON
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
ARCHITECTS AND BUILDING SURVEYORS.

Required for surveying existing buildings, preparing sketch schemes, working drawings and specifications and supervising works in progress for the complete modernisation of the older type of Council flats (jobs up to £100,000).

Applicants should have an interest in this type of work and the ability to act on their own judgment since each will carry his own job through from survey to completion.

Salary up to £1,250. Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/B/1326/6), County Hall, S.E.1.

WALSALL
COUNTY BOROUGH.

PUBLIC WORKS DEPARTMENT.

Applications are invited from suitable qualified persons for the following appointments in the Chief Architect's Section of the Public Works Department:

(a) SENIOR ASSISTANT ARCHITECT, within Grade A.P.T. IV (£1,140-£1,310 per annum).

(b) ASSISTANT ARCHITECTS, within Grade A.P.T. III-IV (£960-£1,310 per annum).

The Department is engaged on an extensive programme of architectural work, which includes comprehensive housing development incorporating multi-storey flats; an education programme including comprehensive schools, college of art and a youth centre; and extensive central area redevelopment embracing shops, offices, police headquarters, law courts, library, art gallery and other buildings associated with a proposed two-tier ring road.

All posts are superannuated and subject to a medical examination. Applicants should disclose if they are related to a member or officer of the Council. Housing accommodation will be made available if required.

Applications stating age, present position, salary, qualifications, details of experience and previous appointments, and the names of two referees, should be submitted to reach the undersigned by MONDAY, 12th JUNE, 1961.

M. E. HABERSHON,
Borough Engineer and Surveyor.

Council House,
Walsall.
May 24, 1961.

LIVERPOOL
REGIONAL HOSPITAL BOARD

require

ASSISTANT REGIONAL ARCHITECT. Salary £1,825 x £75(2) x £100(2)-£2,175.

In the Department of the Regional Architect, T. Noel Mitchell, B.Arch. (Liverpool), F.R.I.B.A.

Graduate of a recognised School of Architecture preferred. High status in design essential. The Department has Principal Assistants—each responsible for a section of work which includes major projects—these being assisted by a number of Senior and Assistant Architects.

The post is superannuable; car mileage and subsistence allowances payable. The Department is in pleasant modern offices in a central position in the city.

Applications to reach me by 16th JUNE, 1961, stating age, education, qualifications, present salary, experience, present and previous posts and names and addresses of three referees (two technical).

VINCENT COLLINGE,
Secretary to the Board.

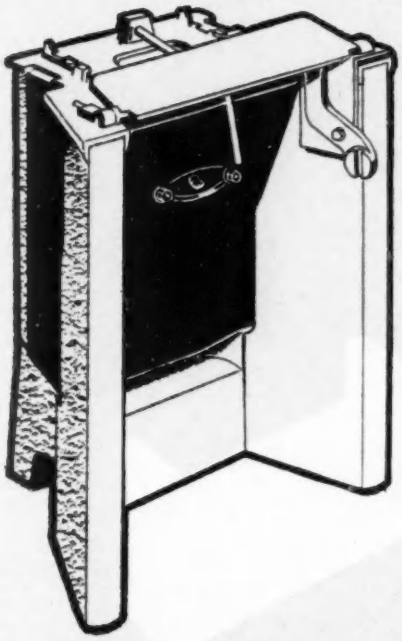
55 Castle-street,
Liverpool, 2.

APPROVED BOILER FLUE SETS

Specify SOFONO

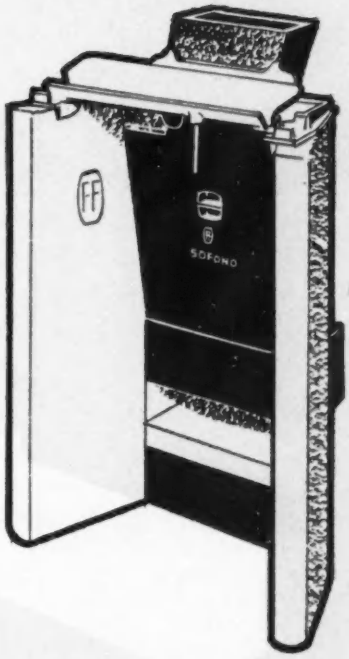
SOFONO HIGH DUTY FLUE SET

Construction: Refractory throughout with cast iron sliding damper. Cast iron throat restrictor available. Boiler in steel, cast iron or copper tapped 1¼" BSP both sides. One side plugged.
Inset Fires: Approved with range of 16" inset fires illustrated. Choice of 6 vitreous enamel colours. Complete with ashpan and multi-purpose tool. Integral gas ignition burner when required.
Output: Space Heating: Rooms up to 1500 cu. ft. *Hot Water Output:* Max. maintainable 18,000 Btu/hr. *Domestic Hot Water only:* Through 40 gallon storage cylinder. *Combined System:* Domestic hot water service through 30 gallon cylinder PLUS 45 sq.ft. of radiator surface including piping. *Radiation Only:* 80 sq.ft. of radiator surface including piping.



SOFONO NORMAL DUTY FLUE SET

Construction: One piece cast iron with self contained flue. Large lift-off cover giving access to flue for cleaning. Boiler in steel, cast iron or copper, tapped 1" BSP one side only—Reversible. Cast Iron Sliding flue damper. Cast iron throat restrictor available.
Inset Fire: Approved with range of 16" inset fires illustrated. Choice of 6 vitreous enamel colours. Complete with ashpan and multi-purpose tool. Integral gas ignition burner when required.
Output: Space Heating: Rooms up to 1500 cu. ft. *Hot Water:* Normal domestic hot water service through 30 gallon storage cylinder.



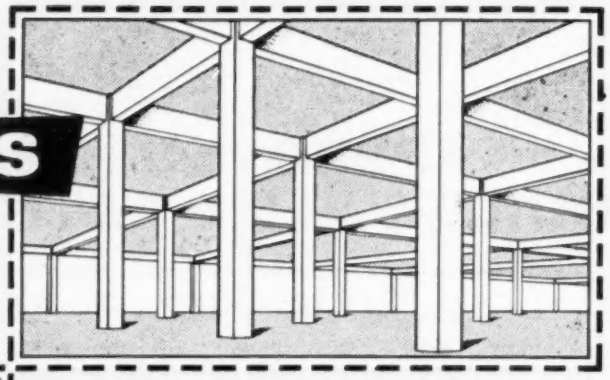
VARIOUS FIRES WHICH CAN BE FITTED TO THE ABOVE APPLIANCES

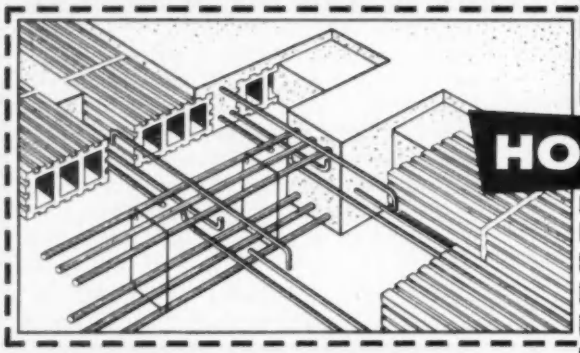
Please write to the Technical Director for information on all Sofono appliances.

GRANGE-CAMELON IRON CO. LTD., FALKIRK *A Federated Foundries Company*

R. C. FRAMES

and floors (in-situ construction)





HOLLOW-TILE FLOORS

(in-situ construction)

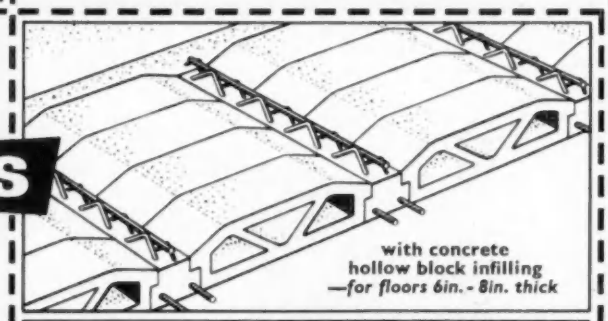
TRIAD FLOORS

—a composite construction floor of precast inverted stub T-beams reinforced with a welded steel lattice

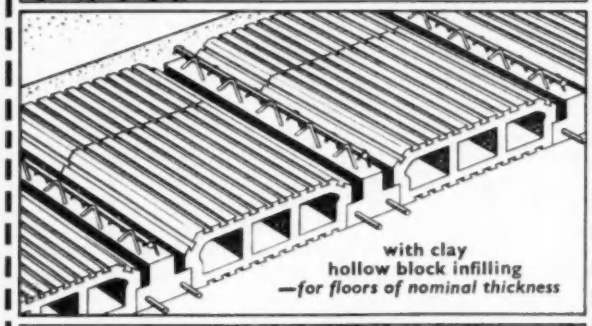
with hollow block infilling of 3 types as illustrated—and an in-situ concrete topping

—requiring NO SHUTTERING.

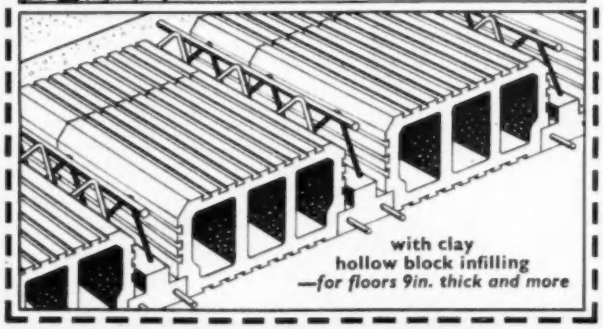
All Triad Floors fixed complete or supplied for fixing by General Contractor



with concrete hollow block infilling
—for floors 6in. - 8in. thick



with clay hollow block infilling
—for floors of nominal thickness



with clay hollow block infilling
—for floors 9in. thick and more

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9-13 GEORGE ST., MANCHESTER SQUARE, LONDON, W.1. Welbeck 9131

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ILFORD
BOROUGH.

BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF ASSISTANT ARCHITECT, Grade A.P.T. III.

Candidates should preferably have passed the Intermediate Examination of the R.I.B.A.

The commencing salary will be fixed within the scale £960-£1,140, according to qualifications and experience. London Weighting payable in addition. Five-day week.

The candidate appointed will be required for work in connection with housing and multi-storey flats.

The appointment will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Acts, to the National Conditions of Service and to satisfactory medical examination.

The Council is prepared to consider, if necessary, the provision of housing accommodation.

Application forms, obtainable from the Borough Engineer, Town Hall, Ilford, should be returned not later than MONDAY, 12th JUNE.

ENFIELD
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
(Population 110,000—Area 12,400 acres.)

Applications are invited for the following established positions within the Grades shown:—

(a) ASSISTANT ARCHITECT, A.P.T. IV (£1,140-£1,310);
(b) ARCHITECTURAL ASSISTANTS, A.P.T. III (£960-£1,140);
(c) TECHNICAL ASSISTANT, A.P.T. III (£960-£1,140).

The commencing salary will be fixed at a point within the scale commensurate with qualifications and experience.

The appropriate London Weighting allowance will be paid in addition to the above salaries.

Candidates for post (a) must be Associates of the Royal Institute of British Architects; for post (b) applicants must have passed the Intermediate Examination of the R.I.B.A.; for post (c) applicants must have a sound knowledge of all aspects of the building trade and be able to carry out inspections, prepare reports, specifications and estimates for works in connection with repair and maintenance of Schools, and should possess the Higher National Certificate in building.

The Council are prepared to consider the provision of housing accommodation if required, or 100 per cent. advances to successful applicants for house purchase within the Borough.

Five-day week.

Details of appointments and application forms obtainable from Mr. H. D. Peake, M.Sc.(Eng.), Borough Engineer and Surveyor, 7 Little Park-gardens, Enfield, Middx.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Civic Centre,
Enfield.

BUCKS
COUNTY COUNCIL.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the temporary appointment of a CLERK OF WORKS under the County Architect, at a salary up to £18 per week, according to qualifications and experience.

The appointment is for the supervision of major building contracts in the High Wycombe Marlow area.

Applications, on forms provided, must be delivered to the undersigned by 19th JUNE, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks.

ROTHERHAM
COUNTY BOROUGH.

ARCHITECTS.

Applications are invited for the following appointments:

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. V (£1,310-£1,480).
(b) ARCHITECTURAL ASSISTANTS, A.P.T. III-IV (£960-£1,310).

The department has a varied and expanding programme of architectural work including schools and large central redevelopment areas.

Candidates for (a) are required to be Associate Members of the R.I.B.A. and with a good general experience in design and construction. (b) are required to have passed Parts I and II of the R.I.B.A. final examination.

The commencing salary in the grades will be according to capabilities and experience.

Housing accommodation will be available if necessary.

Applications to be endorsed "Architects" stating age, qualifications and details of experience, together with names of two referees, should be received by me not later than MONDAY, 12th JUNE, 1961.

Canvassing will disqualify.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
May, 1961.

BRACKNELL
DEVELOPMENT CORPORATION.

Applications are invited for the post of ARCHITECT. Salary range £1,140-£1,310. The Minister is expected to give his decision shortly on the proposal to extend the scope of the New Town by increasing the designated area from 1,150 to 3,030 acres. Superannuation schemes, medical examination, 5-day week. Good housing accommodation available. Applications, stating age, education, qualifications, experience and appointments held (with dates and salaries), and the names of two referees, should be addressed to the General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks., to be received not later than 7th JUNE.

AIR MINISTRY

Requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £726 (age 23) to £961 max. in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz.:—

Technical Grade II, £961-£1,098. 123 posts.
Technical Grade I, £1,098-£1,348. 42 posts.
Technical Grade B, £1,348-£1,552. 6 posts.
Technical Grade A, £1,439-£1,697. 6 posts.

Vacancies occurring in the higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. 5-day week with 18 days' paid leave a year initially.

Applicants, who must be natural born British subjects, must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. schedule an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon-street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised.

METROPOLITAN POLICE

RECEIVER'S OFFICE
requires
ASSISTANT SURVEYORS

for work in connection with the maintenance and alteration of all types of Police buildings and of Magistrates' Courts within the Metropolitan Police District.

Salary £991 per annum at age 25, rising by annual increments to £1,490 per annum. (Maximum salary on entry £1,318 per annum at age 34 or over.)

Qualifications: Applicants must be Registered Architects or have achieved Corporate membership of R.I.C.S. (Building Surveying Section).

Apply to Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, London, S.W.1.

WOOD GREEN
BOROUGH.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the ABOVE APPOINTMENT on the permanent establishment of the Borough Engineer's Department in A.P.T. Grade III (£963-£1,140) plus the appropriate London Weighting Allowance.

Applicants must be fully qualified architects and have had experience in the preparation of plans, drawings and other details associated with local authority housing schemes and other works.

The Council may make housing accommodation available to the successful applicant, if desired.

The appointment is subject to the Local Government Superannuation Acts and to medical examination.

Applications stating age, qualifications, experience and names and addresses of two referees must reach the undersigned by the 9th JUNE, 1961.

G. W. PLATER,
Town Clerk.

Town Hall,
Wood Green, N.22.
23rd May, 1961.

COVENTRY CITY.

DEPARTMENT OF ARCHITECTURE AND PLANNING.
(QUANTITY SURVEYING DIVISION.)

QUANTITY SURVEYORS, appropriate qualified, A.P.T. IV-V (£1,140-£1,480).

Appointments may be made, according to qualification/experience within combined Grade. Permanent and pensionable subject to satisfactory medical history.

Housing accommodation in approved circumstances or 95 per cent advance for house purchase. Removal expenses loan.

Good general experience desirable and ability to take-off for large Contracts required.

Details and application form from City Architect and Planning Officer, Council House, Coventry, returnable by 19th JUNE, 1961.

LIVERPOOL
REGIONAL HOSPITAL BOARD

require
ARCHITECTS
SENIOR ASSISTANT ARCHITECTS, £1,360-£1,600
ASSISTANT ARCHITECTS, £905-£1,310
ARCHITECTURAL ASSISTANTS, £625-£900
ARCHITECTURAL DRAUGHTSMEN, £475-£685
and
SURVEYORS
ASSISTANT BUILDING SURVEYORS, £905-£1,310.

In the Department of the Regional Architect, T. Noel Mitchell, B.Arch., F.R.I.B.A. Interesting new building is projected including new Hospitals and the complete replanning of a large number of older Hospitals covering a wide variety of building types.

All posts are superannuable and mileage allowances will be paid to approved car users.

Applications to reach me by 16th JUNE, 1961, stating post applied for, age, education, qualifications, present salary, experience, present and previous posts and names and addresses of three referees (two technical).

VINCENT COLLINGE,
Secretary to the Board.

55 Castle-street,
Liverpool, 2.

NR. CANTERBURY.

ST. AUGUSTINE'S HOSPITAL, CHARTHAM DOWN.

WORKS ASSISTANT required in the office of the Building Supervisor. Salary £590 x £25 (4)—£690 at age 26 or above. The commencing salary will be abated by £25 per annum for each year under age 26 years. There is no age limit but candidates should have building experience either as an architectural student or as a trained craftsman holding or studying for O.N.C. and/or City and Guilds Certificate. This post offers sound experience and opportunity for a candidate desirous of gaining advancement in this branch of the Health Service. The provisions of the National Health (Superannuation) Regulations and the conditions of service of the appropriate Whitley Council will apply. Applications, stating age, experience, and qualifications, together with the names and addresses of two referees, should be forwarded to the Group Secretary by the 15th JUNE.

LEEDS CITY.

APPOINTMENT OF DEPUTY CITY ARCHITECT.

Applications are invited from members of the Royal Institute of British Architects for the appointment of DEPUTY CITY ARCHITECT at a commencing salary of £2,405 per annum rising by increments of £100 to £2,705. A casual user motor car allowance is also payable.

Assistance will be given in providing housing accommodation if required.

The appointment is superannuable; medical examination.

Application forms to be obtained from the undersigned are to be returned not later than FRIDAY, 23rd JUNE, 1961.

Canvassing disqualifies.

J. R. SHERIDAN-SHEDDEN,
City Architect.

Priestley House,
Quarry Hill,
Leeds 9.

WEMBLEY
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ASSISTANT BUILDING INSPECTOR.

Salary: A.P.T. Grade I (£645-£815), or A.P.T. Grade II (£815-£960), according to experience and qualifications (if any), plus up to £40 per annum London "Weighting" Allowance.

Applicants should have had some experience of building construction and a knowledge of local By-laws.

Applications disclosing any relationship to a Member or Senior Officer of the Council, stating age, experience, details of present and previous appointments and giving names and addresses of two referees must reach the Borough Engineer and Surveyor, Town Hall, Wembley, Middlesex, by 12th JUNE, 1961.

Housing accommodation cannot be provided.

Canvassing will disqualify.

N. CUMPSTY,
Town Clerk.

Town Clerk's Office,
Town Hall,
Wembley,
Middx.
26th May, 1961.

HORNSEY
BOROUGH.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.
Grade A.P.T. II-III.

Applications are invited for the ABOVE APPOINTMENT in the Architects' Section of the Borough Engineer and Surveyor's Department. Salary according to qualifications and experience within Grades A.P.T. II/III (£815 to £1,140, plus London Weighting).

Details and application form from the Borough Engineer and Surveyor, Town Hall, The Broadway, Crouch End, London, N.8.

Application forms to be returned by MONDAY, the 19th JUNE, 1961.

SOUTH EASTERN ELECTRICITY BOARD
CLERK OF WORKS

Applications are invited for the position of Clerk of Works in the Surrey Area. Applicants should have been trained as either a bricklayer or carpenter and have held the position of builder's foreman, or alternatively be holders of the Ordinary National Certificate in building or its equivalent. Salary £780 x £25 to £880 p.a. under N.J.C. Grade 3. Superannuable. Excellent sick pay and holiday schemes. Applications, quoting BLDR, on forms from the **Surrey Manager, Seeboard, Rough Rew, Ridgeway Road, Dorking, Surrey, by 12th June, 1961.**

GEORGE WRAY,
Secretary.

KINGSTON UPON THAMES
ROYAL BOROUGH.

Appointment of ASSISTANT ARCHITECT (A.P.T. Grade IV, £1,140-£1,310 per annum, plus London Weighting).

Applications are invited for the above mentioned APPOINTMENT. Details and application forms obtainable from Borough Surveyor, Guildhall, Kingston upon Thames, and returnable by 16th JUNE, 1961.

L. V. POWELL,
Town Clerk.

Guildhall,
Kingston upon Thames.

SWANSEA
COUNTY BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.
TEMPORARY CLERK OF WORKS.

Applications are invited for the following posts:

ONE TEMPORARY CLERK OF WORKS, Miscellaneous Grade VI (£760 to £825 p.a.), for 92 Houses, Sketty Park.

ONE TEMPORARY CLERK OF WORKS, Miscellaneous Grade V (£685 to £760 p.a.), for 224 Flats at Dyfatty.

Candidates must be thoroughly capable and have a sound, practicable and up-to-date knowledge of building works; experienced in the superintendence and direction of large building works; able to take measurements and levels; set out works and keep proper works records and be on the works at all ordinary working hours during the progress of the building operations.

Candidates must be under 45 years of age unless they are already in superannuated service of a local or public authority in respect of which superannuation interchange is available.

The appointment will be subject to the provisions of the Local Government Superannuation Acts and may be terminated by one month's notice on either side. The successful candidate will be required to pass a medical examination.

Form of application may be obtained from the Borough Architect, The Guildhall, Swansea, to whom it must be returned not later than 16th JUNE, 1961.

Canvassing disqualifies.

IORWERTH J. WATKINS,
Town Clerk.

Guildhall,
Swansea.
29th May, 1961.

SHEFFIELD CITY.

CITY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF SENIOR ASSISTANT QUANTITY SURVEYOR.
Scale "B" (£1,480-£1,670.)

Applications are invited from appropriately qualified persons for the ABOVE APPOINTMENT in the Quantity Surveyor's Section of the Department of the City Architect, Mr. J. L. Womersley.

A Chartered Quantity Surveyor is in charge of the Section and the appointment offers considerable scope and experience to enthusiastic and progressive Quantity Surveyors, who are able to lead a Group of Quantity Surveyors in the Preparation of Bills of Quantities and Contract Management for major schemes.

Commencing salary within the above grade commensurate with the successful applicant's qualifications and experience.

Assistance with housing accommodation and removal expenses will be given in appropriate cases.

A five-day week is in operation.

Applications stating age, education, training, qualification, experience, present and past appointments (with dates and salaries) and the names of two referees should reach me by 9th JUNE, 1961.

JOHN HEYS,
Town Clerk.

Branches at Birmingham, Bristol, Glasgow, Manchester, Newcastle, Southampton and Wakefield.

HOVE
BOROUGH.

SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above APPOINTMENT in the Borough Engineer and Surveyor's Department at a salary in accordance with A.P.T. Grade IV (£1,140-£1,310).

Candidates should have a general experience including the preparation of drawings and specifications and should have passed the Final Examination of the Royal Institute of British Architects or equivalent. One month's notice is required on either side.

Consideration will be given to the provision of housing accommodation if required.

Applications stating age, training, qualifications, present and previous appointments and experience, together with the names and addresses of two referees should be delivered to the Borough Engineer and Surveyor, Town Hall, Hove, 3, by SATURDAY, 17th JUNE, 1961.

LEYTON
BOROUGH.

Applications invited for appointment to established post of SENIOR PLANNING ASSISTANT in Borough Engineer's Department. Salary within Grade A.P.T. III of National Joint Council's Scheme, viz. £960-£1,140 per annum, plus London Weighting. HOUSING ACCOMMODATION will be made available to successful applicant and the appointment carries an "ESSENTIAL USER" CAR ALLOWANCE for vehicle not exceeding 10 h.p. or 1,199 cc.

N.J.C. Conditions of Service. 5-day week. Staff Canteen available.

Apply by letter with details of age, experience and names, etc., of two referees, to reach the Borough Engineer, Town Hall, Leyton, E.10, not later than 8th JUNE, 1961.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.

OXFORD
REGIONAL HOSPITAL BOARD.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the appointment of a TEMPORARY CLERK OF WORKS to supervise the building of the first stage of the Development of the Kettering General Hospital, Northamptonshire (approximate cost £700,000).

The duration of the contract will be approximately 2½ years.

Salary £1,050 p.a. plus a responsibility allowance of £50 p.a.

Applications, stating age, qualifications, previous experience, present appointment and date when available, together with the names of two referees, should reach the Secretary, Oxford Regional Hospital Board, 43 Banbury-road, Oxford, not later than 19th JUNE, 1961.

NEWCASTLE UPON TYNE
CITY AND COUNTY.

CITY ARCHITECT'S DEPARTMENT.

A unique opportunity exists in this office for competent ARCHITECTS to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:

J.N.C. "C": £1,560-£1,825 per annum.
J.N.C. "B": £1,410-£1,670 per annum.
A.P.T. V: £1,310-£1,480 per annum.
A.P.T. IV: £1,140-£1,300 per annum.
A.P.T. III: £960-£1,140 per annum.
A.P.T. II: £815-£960 per annum.
A.P.T. I: £645-£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood-road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce, and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Market; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.

HEMEL HEMPSTEAD
BOROUGH COUNCIL.

SENIOR ARCHITECTURAL ASSISTANT.

A.P.T. Grades III-IV, £960-£1,310 p.a.

Applications are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT in the Architectural Section of the Borough Engineer's Department. Candidates possessing the Final of the Royal Institute of British Architects or similar qualification will be paid within A.P.T. IV.

The appointment will afford experience on houses, flats, shops, community centres, a sports pavilion, a covered swimming pool and various other works.

Housing accommodation will be available.

The appointment will be subject to the Local Government Superannuation Acts, to the National Conditions of Service from time to time in force, and to the passing of a medical examination and will be terminable by one month's notice in writing on either side.

Applications stating age, education, qualifications and experience, together with the names of two referees, should be sent to A. H. Turner, A.M.I.C.E., Borough Engineer, High-street, Hemel Hempstead, Herts, not later than WEDNESDAY, the 14th JUNE, 1961.

Canvassing will disqualify, and applicants must state whether to their knowledge they are related to any member or senior officer of the Council.

C. W. G. T. KIRK,
Town Clerk.

Town Hall,
Hemel Hempstead,
Herts.
25th May, 1961.

HEREFORD CITY.

APPOINTMENT OF CITY ARCHITECT.

Applications are invited for the appointment of CITY ARCHITECT at a salary commencing at £1,560 per annum and rising by four annual increments of £75 to a maximum of £1,860 per annum. The Conditions of Service contained in the Memorandum and Recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities will apply to the appointment. A lump sum car allowance will be paid and temporary housing accommodation will be made available, if required. The appointment is determinable by either party on giving three months' notice in writing.

Candidates must be members of the Royal Institute of British Architects.

Particulars of the appointment and forms of application may be obtained from the undersigned to whom applications must be delivered not later than 26th JUNE, 1961.

J. A. WESTON,
Town Clerk.

Town Hall,
Hereford.

HENDON
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
ASSISTANT ARCHITECT.

Applications are invited for the above APPOINTMENT at commencing salary according to experience within Grade A.P.T. III (£960-£1,140 plus London Weighting £45).

Applicants must be suitably qualified and previous experience in school work, housing and redevelopment, or civic buildings will be an advantage.

Pensionable post. National Scheme. Medical Examination. Appointment terminable by one month's notice on either side.

Applications stating age, education, qualifications, experience, present appointment and salary, together with the names and addresses of two referees, must reach the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, by 19th JUNE, 1961.

Canvassing will disqualify.

R. H. WILLIAMS,
Town Clerk.

Town Hall,
Hendon,
N.W.4.

CARLTON
URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above APPOINTMENT at a salary in accordance with Grade IV and V of the A.P.T. Division of the Scales of Salaries of the National Joint Council commencing at £1,140 per annum and rising by annual increments to £1,480 per annum the point of entry to be determined having regard to the experience of the applicant.

Applicants must be Associates of the R.I.B.A. or Registered Architects.

The appointment will be subject to the provisions of the Local Government Superannuation Acts 1937 to 1953, the National Scheme of Conditions of Service and the satisfactory passing of a medical examination.

Applications stating age, qualifications and details of experience, together with names of three referees should be forwarded to the undersigned by 10 a.m. on TUESDAY, 20th JUNE, 1961.

Housing accommodation will be made available if required and removal expenses will be paid by the Council.

A. E. F. WALKER,
Clerk of the Council.

Council House,
Burton-road,
Carlton,
Nr. Nottingham.

CAMBRIDGESHIRE
COUNTY COUNCIL.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the appointment of CLERK OF WORKS for forthcoming contracts.

Applicants should have held previous posts as a Clerk of Works or as a General Foreman, should have had wide experience in the supervision of all trades and should be able to drive a car (for which mileage allowance will be paid or a fleet car provided).

The salary will be £15 15s. 0d. per week and the appointment will be temporary in the first instance.

The contract works concerned will be starting on site shortly, and are expected to occupy a period of 2-3 years.

Applications, stating age, experience and the names of two referees, should be delivered to the undersigned not later than FRIDAY, 16th JUNE, 1961.

CHARLES PHYTHIAN,
Clerk of the County Council.

Shire Hall,
Cambridge.
19th May, 1961.

CARLISLE CITY.

CITY SURVEYOR'S DEPARTMENT.

Applications are invited from suitably qualified persons for the following appointments:—

ASSISTANT QUANTITY SURVEYOR, A.P.T. II/III (£815-£1,140);
ASSISTANT QUANTITY SURVEYOR, A.P.T. I (£645-£815).

Salary will be in accordance with qualifications and experience. Applications stating age, qualifications, present and past appointments with dates and salaries, experience and 3 referees, to be received by City Surveyor, 18 Fisher-street, Carlisle, by 17th JUNE, 1961.

H. D. A. ROBERTSON,
Town Clerk.

SHEFFIELD CITY.

CITY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF CHIEF ENGINEERING ASSISTANT (HEATING AND VENTILATING).
SCALE "B" (£1,480-£1,670).

Applications are invited from suitably qualified persons for this appointment on the permanent staff of the City Architect, Mr. J. L. Womersley.

Applicants must be experienced in the preparation of layout schemes, specifications and estimates for the installation and maintenance of heating, ventilating and domestic hot and cold water services in all types of buildings. The post offers considerable scope and experience to an enthusiastic and progressive Heating Engineer able to lead a small team dealing with all aspects of heating and ventilating work.

Salary within the above grade commensurate with the successful candidate's qualification and experience.

A five-day week is in operation.

Applications stating age, education and training, qualifications, present and past appointments (with dates and salaries), and the names and addresses of two referees should reach me by MONDAY, 12th JUNE, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1.

SOUTHAMPTON

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the permanent position of TECHNICAL ASSISTANT (TOWN PLANNING). Miscellaneous Grade IV (£625-£685) to deal with land charge searches, site inspections, general enquiries and development control work.

Commencing salary within grade according to experience and qualifications.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable by 14th JUNE, 1961.

WILLESDEN
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following Temporary Appointments:—

(a) GENERAL FOREMAN
(b) CLERK OF WORKS.

Salary for each post would be within Grade A.P.T. III plus London Weighting (£1,005-£1,185 p.a.).

Candidates must have a sound knowledge of building works and considerable experience in supervision during construction of multi-storey flats.

The Council cannot assist with housing accommodation.

Further details and application forms obtainable from Borough Engineer and Surveyor, Town Hall, Dyne-road, N.W.6, and must be returned not later than 10 a.m. on MONDAY, 19th JUNE.

(sgd.) R. S. FORSTER,
Town Clerk.

CWMBRAN
NEW TOWN,
MONMOUTHSHIRE.

Applications are invited from suitably qualified ARCHITECTS who wish to take part in an interesting and varied programme of work including all types of residential development, Town Centre development and Neighbourhood Shopping Centres.

(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. V, £1,310-£1,480 p.a. Candidates must be Associates of the R.I.B.A., with suitable office experience.

(b) ARCHITECTURAL ASSISTANTS, Grade A.P.T. III-IV, £960-£1,310. Candidates should have passed the Intermediate Examination of the R.I.B.A. and have had some office experience, particularly in the preparation of working drawings.

The posts are superannuable and Conditions of Service are similar to those in Local Government.

Housing accommodation is available to rent or purchase if required.

Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on MONDAY, 26th JUNE, 1961.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.,
Chief Architect.

Cwmbran Development Corporation,
Victoria-street,
Cwmbran,
Mon.

GLOUCESTERSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECT, "Career Class," commencing in A.P.T. IV (£1,140-£1,310 p.a.) progressing to A.P.T. V (£1,310-£1,480 p.a.) subject to satisfactory report on reaching appropriate incremental point in Grade. Applicants must be Registered Architects and Associate Members of the R.I.B.A.

(b) ARCHITECTURAL ASSISTANTS, "Qualifying Class."

Vacancies exist in the following Grades:

A.P.T. I, Salary £645-£815 p.a.
A.P.T. II, Salary £815-£960 p.a.
A.P.T. III, Salary £960-£1,140 p.a.
A.P.T. IV, Salary £1,140-£1,310 p.a.

Applicants for posts in Grades I and II should have passed the Intermediate Examination of the R.I.B.A., and for Grades III and IV the full R.I.B.A. Final Examination.

N.J.C. Conditions of Service; superannuation; medical examination.

Applications stating age, present position and salary, details of previous appointments, together with the names and addresses of two persons for reference, must reach the County Architect, Shire Hall, Gloucester, by 12th JUNE, 1961.

GUY H. DAVIS,
Clerk of the County Council.

THE JIFFY SECRET WEDGE NAIL FOR WALLBOARD NO MORE UGLY NAIL HEADS OR HAMMER MARKS

Inserted with a tool holding a pack of 50 nails at one loading.

Also the maker of the JIFFY wallboard bevelling and grooving tools.

Sold and manufactured by the Patentee

ERNEST CHALMER Ltd., SYDENHAM DAMEREL TAVISTOCK, DEVON. Phone: Milton Abbot 222

London Office: 11, LUDGATE HILL, E.C.4. Phone: City 7238.

SUNDERLAND
COUNTY BOROUGH.

PUBLIC WORKS DEPARTMENT.

Applications are invited for the post of BUYER, Grade A.P.T. III (£960-£1,140 per annum).

Candidates should have experience in buying for Building and Civil Engineering Works (Contract and Maintenance) on a large scale including the preparation of Materials Schedules from Bills of Quantities, etc.

Further particulars and form of application may be obtained from the Public Works Manager, Ivor House, 1 and 3 Otto-terrace, Sunderland.

Applications, suitably endorsed, to be addressed to the undersigned at the Town Hall, Sunderland, so as to reach me not later than MONDAY, 12th JUNE, 1961.

The Corporation cannot undertake to provide housing accommodation, but are prepared to make advance on loan to purchase a house for own occupation and assist with removal and lodging expenses.

Canvassing will disqualify.

G. S. McINTIRE,
Town Clerk.

BRENTFORD & CHISWICK
BOROUGH.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment at a salary in accordance with Grade A.P.T. II, £855 to £1,000 including London Weighting Allowance, commencing salary dependent upon experience. The post offers excellent opportunities for gaining architectural training and practical experience. Application forms, returnable within two weeks after this advertisement appears, may be obtained from Borough Engineer and Surveyor.

W. F. J. CHURCH,
Town Clerk.

THE EAST MIDLANDS
ELECTRICITY BOARD.

COVENTRY SUB-AREA.
APPOINTMENT OF THIRD ASSISTANT ENGINEER (CONSTRUCTION).

Applications are invited from suitably qualified and experienced persons for the above appointment.

The salary will be in accordance with Class "L," Grade 12 of the National Joint Board Agreement for technical engineering staff in the Electricity Supply Industry, £1,040 to £1,165 per annum, and will commence at a point commensurate with qualifications and experience.

The duties will include the preparation of estimates, Bills of Quantities, examination of Tenders, and contractors' accounts for civil engineering and building work associated with the construction of sub-stations, offices, workshops, etc., in Coventry and District.

Applicants should possess the Higher National Certificate in Building, or an equivalent qualification, and should hold a current driving licence.

The successful applicant will qualify for membership of the Board's Superannuation Scheme.

Applications, giving full details of age, qualifications, experience, present position and salary, should be forwarded to The Manager, Coventry Sub-Area, Sandy-lane, Coventry, Warwickshire, by the 16th JUNE, 1961, in an envelope endorsed "Third Assistant Engineer (Construction)—Staff Vacancy No. 57/61."

QUANTITY SURVEYORS.

Pensionable posts for men and women in :—

ADMIRALTY
WAR DEPARTMENT
AIR MINISTRY
MINISTRY OF EDUCATION
MINISTRY OF HEALTH
MINISTRY OF HOUSING AND LOCAL GOVERNMENT
MINISTRY OF WORKS
DEPARTMENT OF AGRICULTURE AND FISHERIES FOR SCOTLAND

Age at least 25 and under 35 on 1st January, 1961 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Quantity Surveyor). Candidates must have achieved Corporate Membership of R.I.C.S. (Quantities Section) or have passed examinations necessary for attaining such membership. National salary £936-£1,258 according to age, rising to £1,430. Promotion prospects. Write Civil Service Commission, 17 North Audley-street, London, W.1, for application form quoting *S163*.

STEVENAGE
DEVELOPMENT CORPORATION.

CHIEF ARCHITECT'S DEPARTMENT.

A vacancy exists for an ASSISTANT QUANTITY SURVEYOR in the Chief Architect's Department, on New Towns Salary Grade A.P.T. I/II (£645-£960), starting salary according to qualifications and experience.

The work is of a varied type, i.e. central development, industrial buildings, blocks of flats, housing, etc.

Living accommodation available in due course if necessary.

Applications, giving details of qualifications and experience, and names of two referees, to be sent to the Chief Administrative Officer, Daneshill House, Danestrete, Stevenage, Herts., by FRIDAY, 16th JUNE, 1961.

EDINBURGH.

HERIOT-WATT COLLEGE.

Applications are invited for LECTURESHIP IN BUILDING commencing on 1st September, 1961, or as soon as possible thereafter.

Candidates should hold an Honours Degree or equivalent professional qualification. Previous teaching experience is desirable. Industrial and/or research experience will be regarded as additional qualification.

Candidates may be placed, according to qualifications and experience, either on the Salary Scale for Lecturers Grade I, viz. £1,050-£1,700, or on Grade II (a), £900-£1,550.

Further particulars may be obtained from the Principal to whom applications must be submitted not later than 10th JUNE.

MINISTRY OF WORKS.

TECHNICAL CLASS.

Pensionable posts for men (and women for posts (vi)) with qualifications as below. Age on 1st March, 1961: at least 28 for posts (i), and 25 for other posts.

(i) CLERKS OF WORKS (BUILDING)—eight posts. O.N.C. in Building, or equivalent qualification; apprenticeship as craftsman, or at least three years' full-time (or five years' part-time) training, or at least three years as journeyman or in a builder's general office, followed by not less than five years' experience in building including three years as a site or general foreman or clerk of works.

(ii) SUPERVISING ENGINEERS—nine posts. O.N.C. in electrical and/or mechanical engineering, or technical education to that standard. Five years' apprenticeship or equivalent training essential, followed by at least three years' comprehensive engineering experience or service as supervisor or technical assistant.

(iii) FOREMEN (BUILDING)—12 posts. O.N.C. in Building, or equivalent qualification; apprenticeship in a building trade, followed by at least three years' experience as foreman or charge-hand, either on general building construction and maintenance, or on the preservation and restoration of ancient and historic structures.

(iv) CIVIL ENGINEERING INSPECTORS—two posts. At least seven years' general civil engineering experience, including at least three years in a supervisory capacity. Ability to supervise and set out work in the following fields essential: reinforced concrete of moderate scope; foundations of normal type; deep sewers or sewers as on housing sites; sewage disposal works; concrete and tarmacadam roads. O.N.C. in Building, or equivalent, an advantage.

(v) TECHNICAL ASSISTANTS—three posts (to assist Architects and Maintenance Surveyors). O.N.C. or equivalent in Building, or technical education to that standard, together with at least five years' technical experience with an architect, building surveyor, or building contractor.

National salary £801 (at 25) to £884 (at 28 or over), rising to £988. Promotion prospects. Write Civil Service Commission, 17 North Audley-street, London, W.1, for application form, quoting *S/5312/61*. Closing date 29th JUNE, 1961.

DUNDEE
CORPORATION.

DIRECT LABOUR BUILDING DEPARTMENT.
CHIEF CLERK.

Applications are invited from persons not over 45 years of age for this vacancy. Salary £915-£975 annually.

Applicants should have good experience of cost accountancy relating to large building contracts and maintenance and repair works, jobbing and contract, together with a knowledge of general office administration, including use of Power Samas equipment.

The post is superannuable and the successful applicant will require to pass a medical examination.

Applications, stating age, qualifications, experience and position now held, together with the names of two referees, should be lodged with the Town Clerk, City Chambers, Dundee, not later than 14th JUNE, 1961.

TAUNTON
BOROUGH.

ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the Borough Architect's Department.

ASSISTANT ARCHITECTS. Grade A.P.T. III-IV (£960-£1,140-£1,310 p.a.).

The Council have an interesting programme of estate development and redevelopment schemes including flatted accommodation, groups of shops, old persons' accommodation, market offices and other ancillary buildings.

The posts are superannuable, subject to medical examination and to National Conditions of Service. Salary placing according to qualifications and experience. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, F.R.I.B.A., Borough Architect, Flook House, Station-road, Taunton, WITHIN 14 DAYS of the appearance of this advertisement.

Housing accommodation will be made available to suitable applicants if required.

K. A. HORNE,
Town Clerk.

BEDFORDSHIRE
COUNTY COUNCIL.

Applications are invited from Associate Members of the Town Planning Institute for appointment as AREA PLANNING OFFICER for the Southern part of Bedfordshire. Additional qualifications an advantage and applicant must have had several years' experience in Development Control work with a County Authority. Salary £1,310-£1,480 p.a. Further particulars and application forms from Establishment Officer, Shire Hall, Bedford. Closing date 12th JUNE.

ESSEX
COUNTY COUNCIL.

ILFORD COMMITTEE FOR EDUCATION.

Applications are invited for the appointment in the Education Architects' Section of the Borough Engineer's Office of one MAINTENANCE ASSISTANT, A.P.T. Grade I (£645-£815 per annum) plus appropriate London Weighting.

Applicants should have good knowledge of building construction and experience in dealing with minor alterations and general maintenance of school buildings.

There will also be paid such travelling and subsistence allowances as may be determined from time to time by the Essex County Council.

The post is superannuable and subject to medical examination.

Applications should be made on a form to be obtained from and returned to the Borough Engineer and Surveyor, Town Hall, Ilford, together with copies of not more than three recent testimonials WITHIN 14 DAYS of the appearance of this advertisement.

QUEEN MARY COLLEGE
(UNIVERSITY OF LONDON).

MAINTENANCE DEPARTMENT.
SURVEYING ASSISTANT (MAINTENANCE)

age 24-30. The work involves surveys for alterations and improvements, preparation of plans, approximate estimates and inspection reports.

Salary £650 by £25 to £800 by £30 to £950. Commencing salary according to age and experience.

Five weeks' holiday; Pension Scheme; 35-hour week.

Applications, stating age, experience and present salary and appointment, should reach the undersigned not later than 19th JUNE, 1961.

G. D. PARFITT,
Maintenance Officer.
327 Mile End-road, E.1.

WARRINGTON
COUNTY BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the undermentioned permanent appointments :—

(1) CHIEF ENGINEERING ASSISTANT. Within N.J.C. Scale "A" (£1,320 rising to £1,565 per annum).

(2) ENGINEERING ASSISTANT. Within A.P.T. Grades III-IV (£960 rising to £1,310 per annum).

(3) ENGINEERING ASSISTANT. Within A.P.T. Grade I (£645 rising to £815 per annum).

(4) TWO PRINCIPAL ARCHITECTURAL ASSISTANTS. Within A.P.T. Grade V (£1,310 rising to £1,480 per annum).

(5) ARCHITECTURAL ASSISTANT. Within A.P.T. Grade II (£815 rising to £960 per annum).

(6) ARCHITECTURAL ASSISTANT. Within A.P.T. Grade I (£645 rising to £815 per annum).

(7) PLANNING ASSISTANT. Within A.P.T. Grades III-IV (£960 rising to £1,310 per annum).

All applicants for the above mentioned appointments must be qualified by examination in accordance with the Scheme of Conditions of Service of the National Joint Council for Local Authorities, Administrative, Professional, Technical and Clerical Services.

Housing accommodation will be made available, if required, in respect of appointments (1), (2), (4) and (7).

The appointments, which are terminable by one month's notice on either side are subject to the conditions of service of the National Joint Council and the provisions of the Local Government Officers' Superannuation Act, 1937, the successful candidates (if new entrants to the Council's service) being required to pass a medical examination.

The canvassing of members of the Council, either directly or indirectly will be a disqualification, and applicants must state whether to their knowledge they are related to any member of the Council, or any co-opted member of a Committee, or any officer of the Council. Failure to do so will disqualify or may lead to dismissal without notice.

No printed form of application is being used. Applications stating age, details of training and experience, qualifications, present and previous appointments (in chronological order) together with copies of three recent testimonials, or the names of three referees, should be forwarded to the undersigned so as to be received not later than 12 o'clock Noon on MONDAY, the 19th DAY OF JUNE, 1961.

J. Y. HUGHES, M.I.C.E.,
Borough Engineer and Surveyor.
Town Hall,
Warrington.
26th May, 1961.

POOLE
BOROUGH.

Applications are invited for the appointment of an ASSISTANT ARCHITECT, Grade A.P.T. III (£960-£1,140) in the Borough Architect's Department.

The successful applicant will be engaged on a variety of projects which include a new Civic Centre and a programme of redevelopment including multi-storey flats.

Application forms from the Borough Architect, Municipal Buildings, Poole, Dorset, to be returned to me by TUESDAY, 13th JUNE, 1961.

J. G. HILLIER,
Town Clerk.

May, 1961.

WEDNESFIELD
URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT. Salary within A.P.T. Grade III (£960-£1,140 per annum).

Applicants must have a good experience in Architectural design and construction, and preference will be given to those who have passed the intermediate examination of the Royal Institute of British Architects.

Applications must state age, qualifications, previous appointments and details of experience, together with the names and addresses of two referees.

Th appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, the passing of a medical examination, and will be terminated by one month's notice on either side.

Housing accommodation will be made available, if required, and reasonable removal expenses will be paid.

The District is developing rapidly and offers exceptional experience.

Applications for the appointment must reach the undersigned by not later than FRIDAY, 16th JUNE, 1961.

J. HENWOOD JONES,
Clerk of the Council.
Council Offices,
Alfred Square-road,
Wednesfield,
Staffs.

BRENTFORD AND CHISWICK
BOROUGH.

APPOINTMENT OF BUILDING SURVEYOR.

Applications are invited for the appointment of a BUILDING SURVEYOR on grade A.P.T. II (£855 to £1,000 per annum including London Weighting).

Applicants must be capable of carrying out miscellaneous work to Municipal property, including schools, together with the preparation of estimates. Experience of surveys for improvement grants and house purchase would be an advantage. Post offers scope for advancement.

CONSIDERATION WILL BE GIVEN TO THE PROVISION OF HOUSING ACCOMMODATION IF REQUIRED.

FIVE-DAY WEEK.

Form of application obtainable from the Borough Engineer and Surveyor, Town Hall, Chiswick, to be returned by 12th JUNE, 1961.

W. F. J. CHURCH,
Town Clerk.

NORTHUMBERLAND
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned posts of ASSISTANT ARCHITECTS on the permanent staff of this Department :

Applicants who have passed (a) the R.I.B.A. Final, or (b) the Intermediate Examination are required in connection with the County Council's Building Programme. The programme, which is of considerable size and importance, provides work of a varied and interesting nature in various parts of the County of Northumberland and gives scope in the field of modern design and building construction.

Salary on A.P.T. Scales according to qualifications and experience, with the prospect of promotion within the Department.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and successful candidates will be required to pass a medical examination.

Application forms which can be obtained from the under-signed should be submitted not later than fourteen days from the date of this advertisement.

C. C. BROWN,
County Architect.
30-32 Great North-road,
Newcastle upon Tyne, 2.

HERTFORDSHIRE
COUNTY COUNCIL.

HIGHWAYS DEPARTMENT.

Applications are invited for the appointment of a QUANTITY SURVEYOR in A.P.T. III (£960-£1,140).

Candidates should be suitably qualified and have had experience in dealing with quantities for civil engineering works, particularly road and bridge construction.

Applications at once to the County Surveyor, County Hall, Hertford, stating age, present salary, details of experience, qualifications, and the names of two referees.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
SENIOR ASSISTANT ARCHITECTS (N.J.C. Scale "B," £1,505-£1,670).

Applications are invited from experienced ARCHITECTS for posts on the permanent staff. The County Council has a large and extremely varied building programme, and posts will be filled by men of initiative, imagination and a flair for sensitive design.

Applicants are expected to be Registered Architects, as well as Associates of the Royal Institute of British Architects and, if appointed, will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and conditions of appointment are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 23rd JUNE, 1961.

WORCESTERSHIRE
COUNTY COUNCIL.

ARCHITECTURAL ASSISTANT required, Grade A.P.T. II (£815-£960), in the Section concerned with major School projects. The County Council owns some housing accommodation for which a successful candidate may apply.

Application forms and further particulars can be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14 Castle-street, Worcester, not later than 22nd JUNE, 1961. (N.142)

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECTS, A.P.T. IV (£1,140-£1,310) and A.P.T. V (£1,310-£1,480). (Starting salary according to experience.)

Applications are invited from qualified Architects of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 23rd JUNE, 1961.

CHELSEA
BOROUGH.

BUILDING SURVEYOR
(A.P.T. III-IV, £960 to £1,310 plus £45 p.a. London "Weighting").

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Applicants must have A.R.I.C.S. (Building) or any other appropriate qualifications, and have had good general experience. Council operates 5-day week. Forms of application from Borough Engineer and Surveyor, Town Hall, King's-road, S.W.3, to be returned not later than 23rd JUNE.

REIGATE
BOROUGH.

CLERK OF WORKS required. Salary £850 p.a.; casual car user's allowance. Practical knowledge of building trade, experience in setting out, levelling, supervision of erection of building and keeping site records essential.

Application forms from Borough Engineer, Town Hall, Reigate, to be returned to him, endorsed "Clerk of Works," not later than FRIDAY, the 23rd JUNE, 1961.

HEBER DAVIES,
Town Clerk.

Town Hall,
Reigate.
May, 1961.

WALTHAMSTOW
BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.
ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above appointment at a salary in accordance with Grade A.P.T. II (£815-£960 per annum, exclusive of London Weighting), applicants should have the appropriate qualifications.

The Council will make a 100 per cent. advance for house purchase, if required, in this or adjoining Boroughs.

Application forms, obtainable from the Borough Architect, Town Hall, Walthamstow, E.17, must be returned to the undersigned by noon on SATURDAY, 17th JUNE.

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow,
E.17.
26th May, 1961.

EAST HAM
COUNTY BOROUGH.

TEMPORORY BUILDERS' CLERK.
GRADE A.P.T. I (£645-£815 plus London Weighting Allowance).

Applications are invited for the above post. Applicants must have all-round experience.

Further details and application forms, returnable by the 16th JUNE, 1961, from the Town Clerk, Town Hall, East Ham, E.6.

CANNOCK
URBAN DISTRICT COUNCIL.
(Population 43,000).

ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts in the office of the Council's Architect (Mr. H. Wilcox, A.R.I.B.A.).

(a) CHIEF ASSISTANT ARCHITECT (A.P.T. V, £1,310-£1,480 p.a.).

(b) SENIOR ASSISTANT ARCHITECT (A.P.T. IV, £1,140-£1,310 p.a.).

(c) ARCHITECTURAL ASSISTANT (A.P.T. II, £815-£960 p.a. or A.P.T. III, £960-£1,140 p.a.).

This developing district is not adversely affected by the proposals of the Local Government Commission and is situated 15 miles north of Birmingham and 9 miles from Wolverhampton. It includes a portion of Cannock Chase which is part of a designated area of Outstanding Natural Beauty, containing good facilities for varying sports, and outdoor recreation, and is within reasonably easy reach of Dovedale, the Manifold Valley and other lovely areas in the County. Cannock has a new Grammar School and other good educational facilities.

The successful applicants will be engaged on major schemes including a Central 'Bus Station, Public Baths, New Council Offices, Branch Library, Community Centres, Underground Conveniences and Town Centre Re-development in addition to a continuous housing programme.

HOUSING ACCOMMODATION AVAILABLE to successful married applicants and assistance will be given towards removal expenses. Car allowance will be paid on "Casual User" basis.

Further particulars may be obtained from the undersigned to whom applications must be submitted by 19th JUNE, 1961.

H. C. ALLEN,
Clerk of the Council.

Council House,
The Green,
Cannock,
Staffs.

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COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

(1) CHARTERED QUANTITY SURVEYORS (A.P.T. V, £1,355-£1,525) with good general experience and specialised ability in cost control and detailed estimating in respect of major building works.

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(3) ASSISTANT QUANTITY SURVEYORS (A.P.T. III, £1,005-£1,185). Should have final R.I.C.S. or final I.Q.S. and not less than 5 years' post-qualification experience in measurement of work in progress and settlement of final accounts.

(4) ASSISTANT QUANTITY SURVEYORS (A.P.T. III, £1,005-£1,185). Should have final R.I.C.S. or final I.Q.S. and not less than 5 years' post-qualification experience in preparation of detailed estimates for building works.

(5) WORKERS-UP (A.P.T. II, £855-£1,000) fully experienced and competent to work up complete bills of quantities and final accounts. Should hold O.N.C. or C. & G. (Quantities) or other equivalent technical qualification.

All posts: Established, prescribed conditions.

Application forms (s.a. f'scap. e.) from County Architect, 1 Queen Anne's Gate Buildings, Dartmouth-street, S.W.1, returnable by 10th JULY (Quote G.454 B.)

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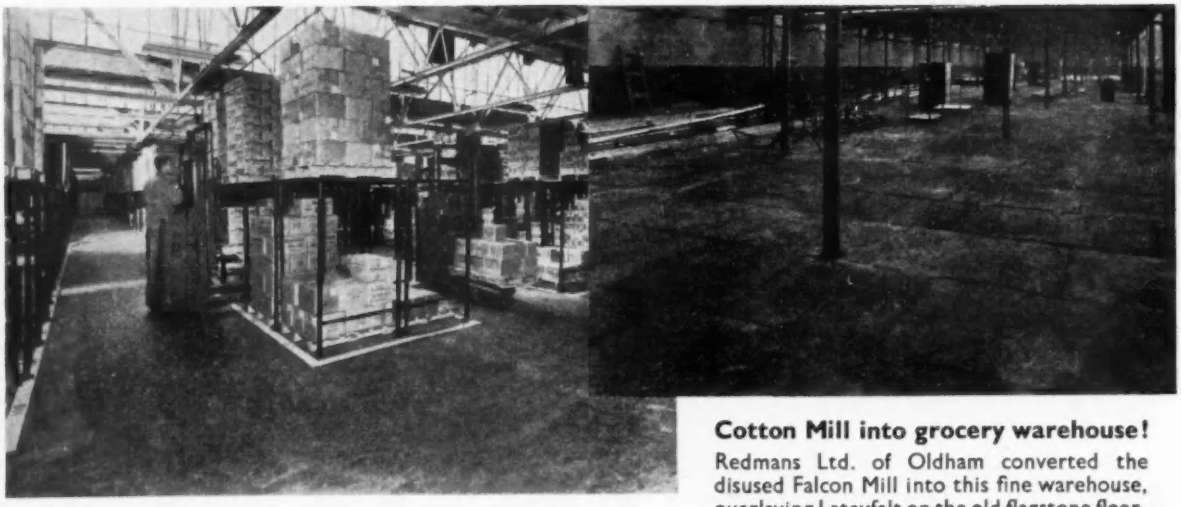

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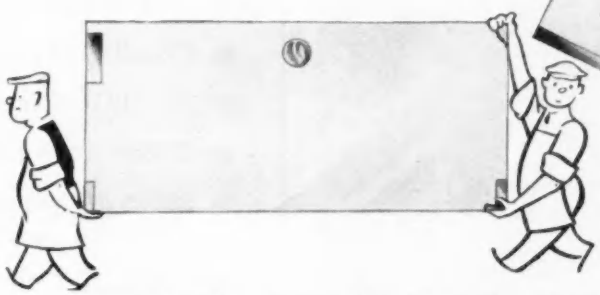

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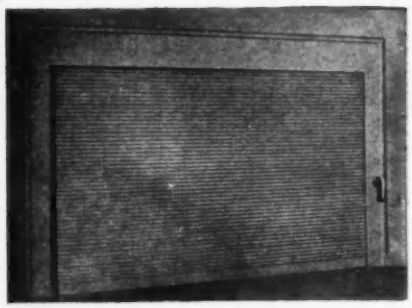

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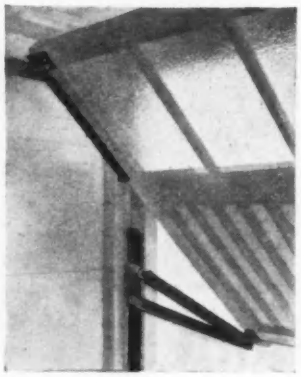

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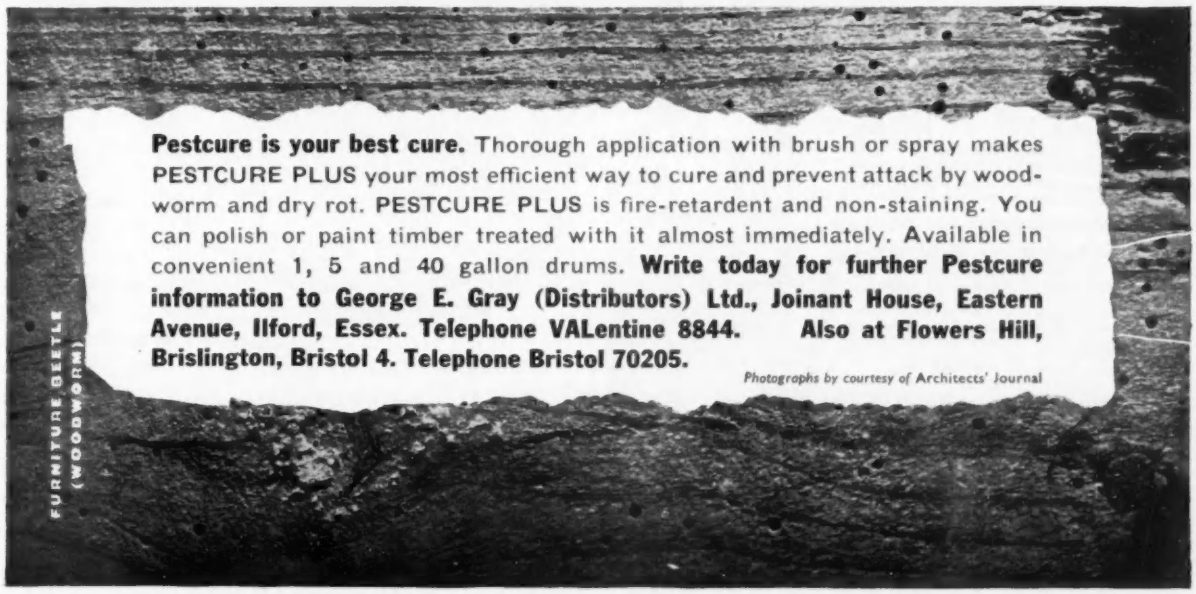

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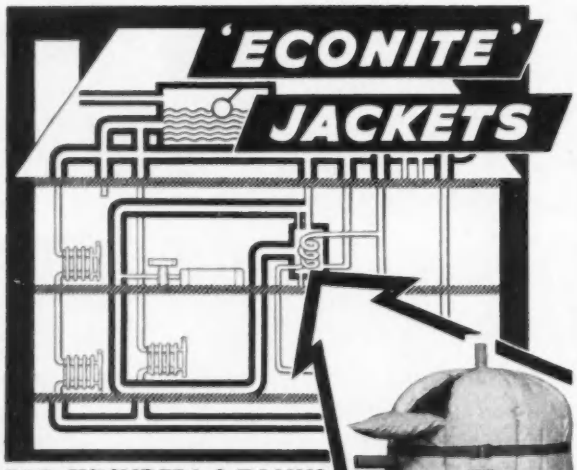

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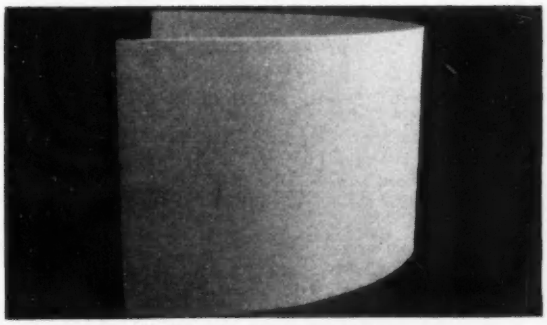

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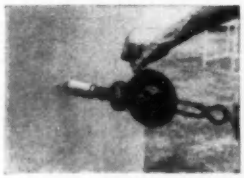

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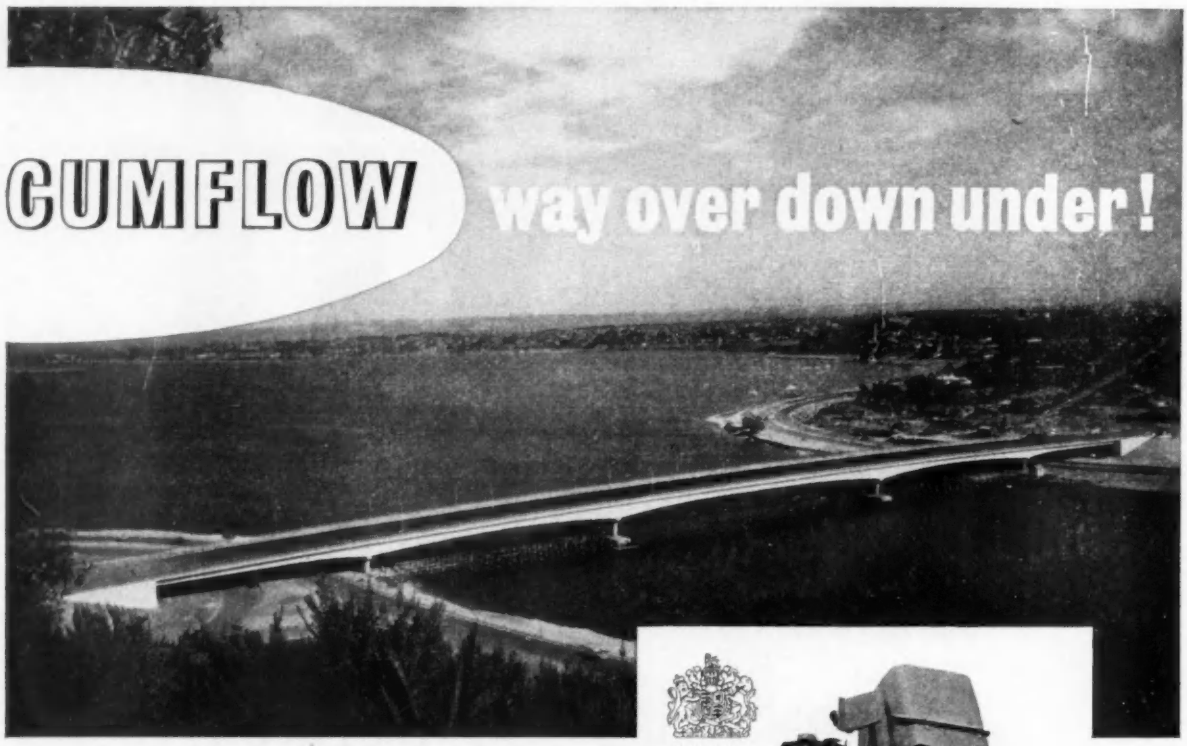

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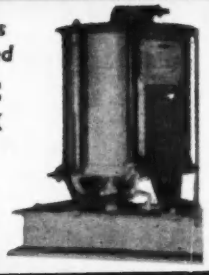

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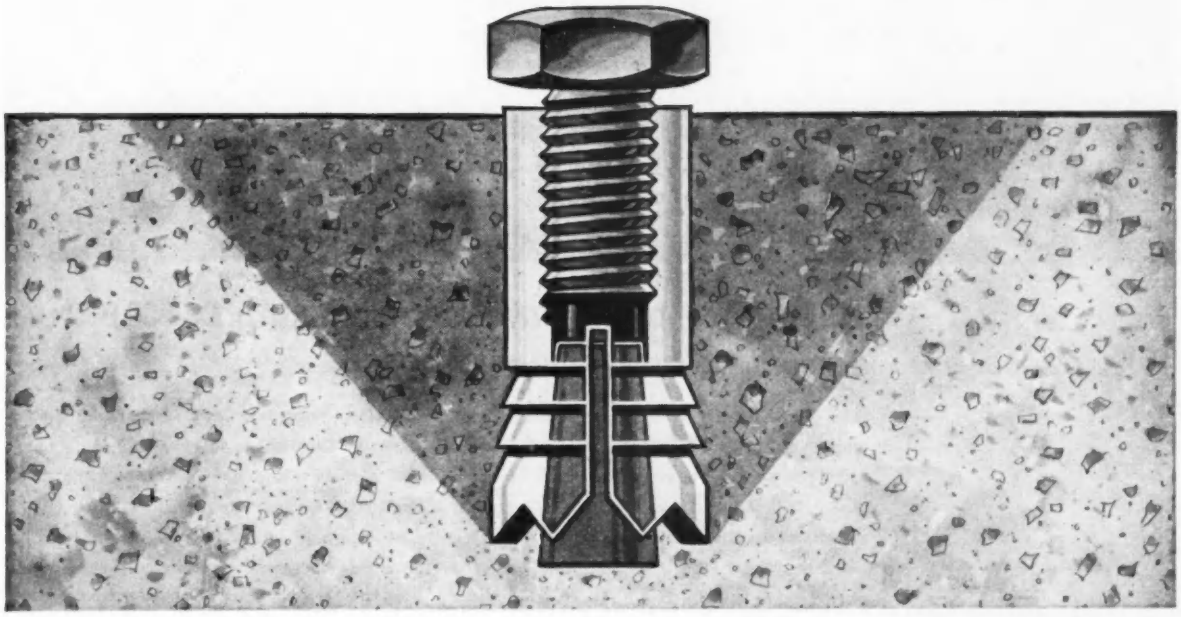

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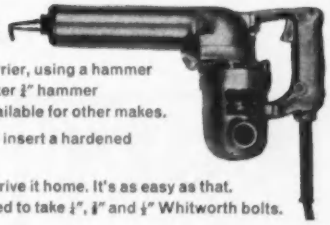

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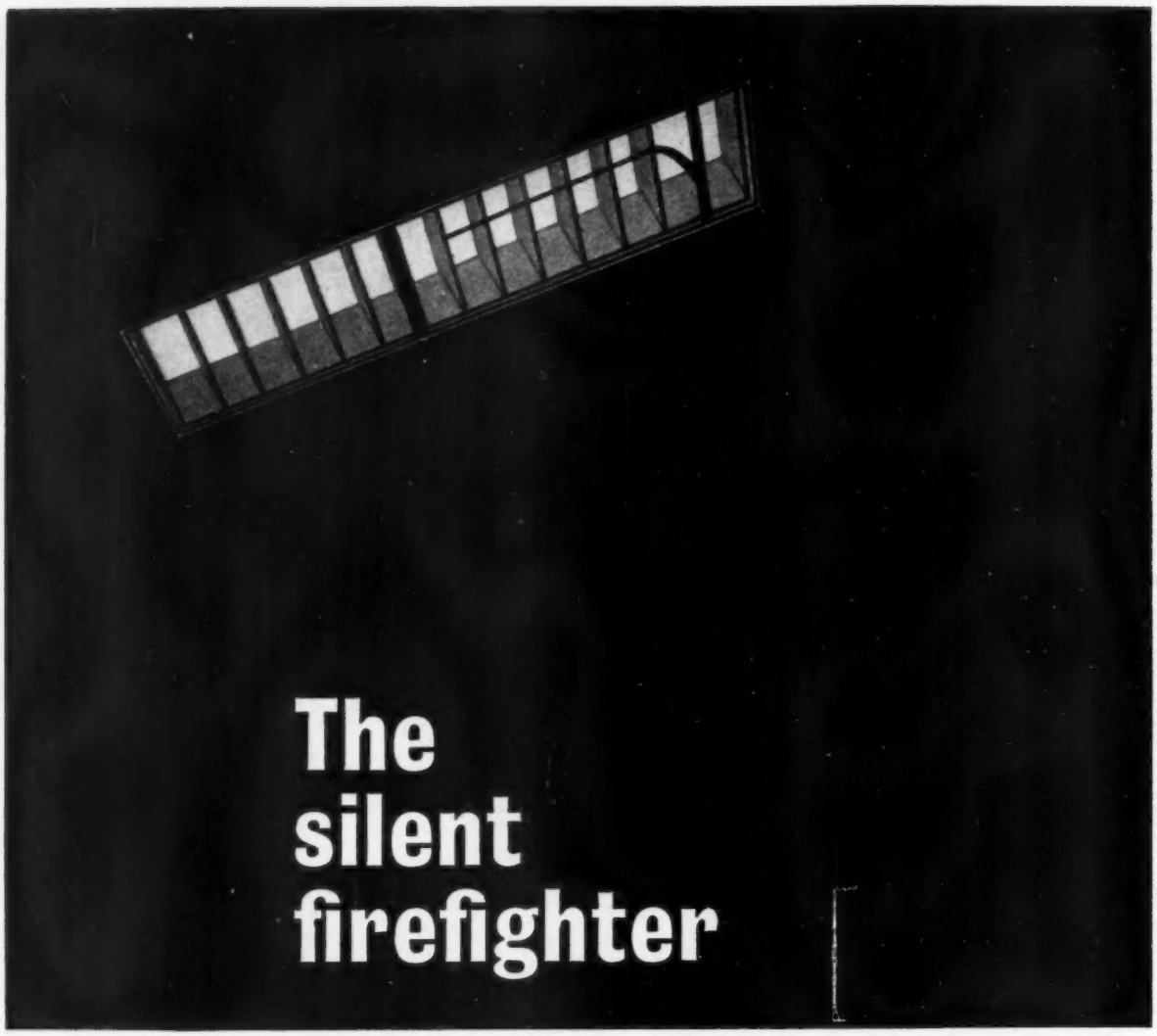

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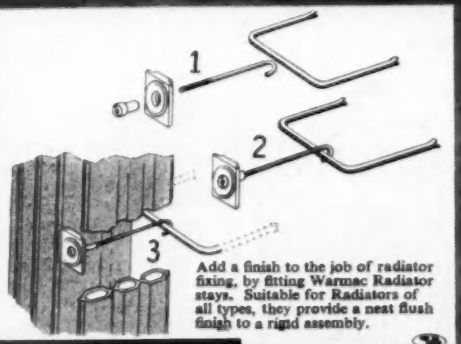

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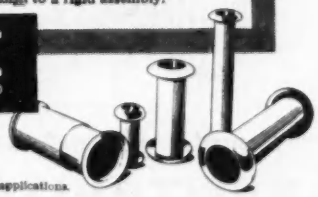

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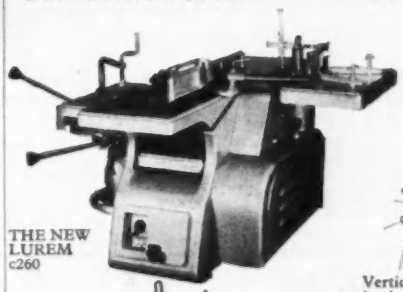

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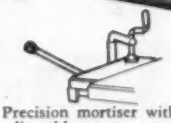

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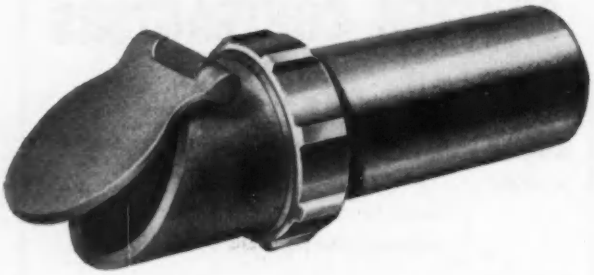

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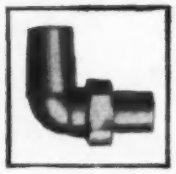

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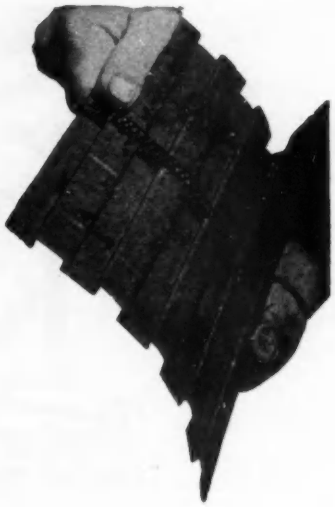

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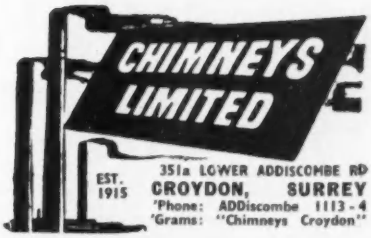

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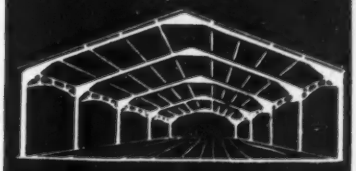
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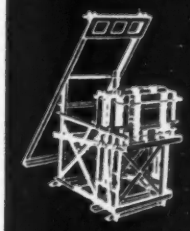
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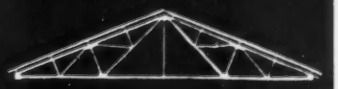
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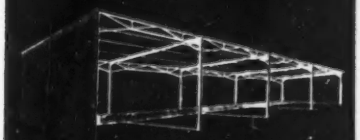
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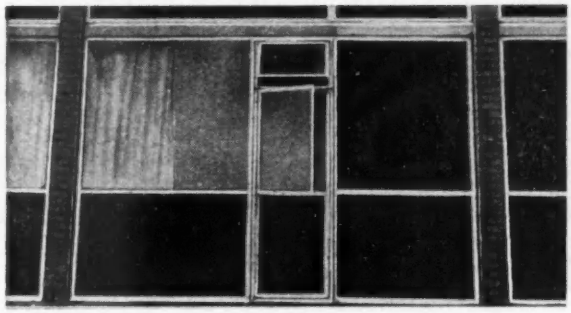

For bedrooms at ground level a stall door was specially designed to give direct access to a car park outside. The clean, simple lines of the general design are preserved by installing the opening window and ventilator light in the upper half of the door.

Architects: Fitzroy Robinson & Partners.
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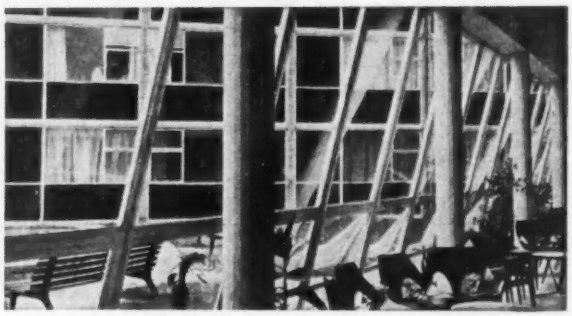

In the shopping arcade, passengers can make their purchases and then enjoy a few moments peace and quiet between flights. A feature of the arcade is the glazed front set at an angle. These Williams & Williams windows were specially designed to bring in the maximum amount of light and make room for the plant trough.

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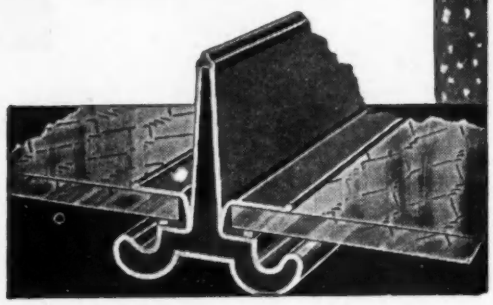

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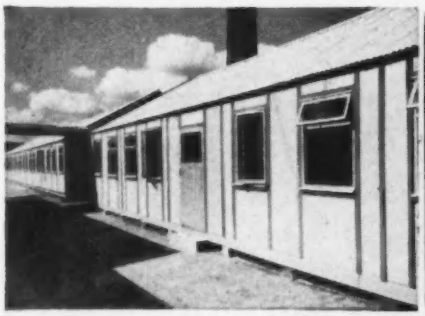

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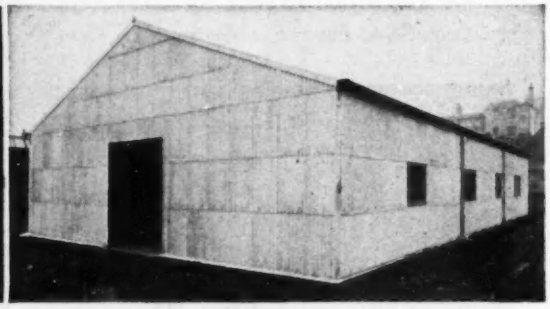

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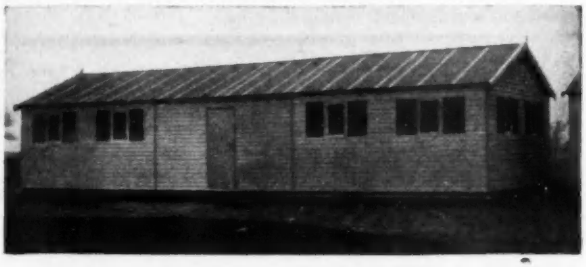

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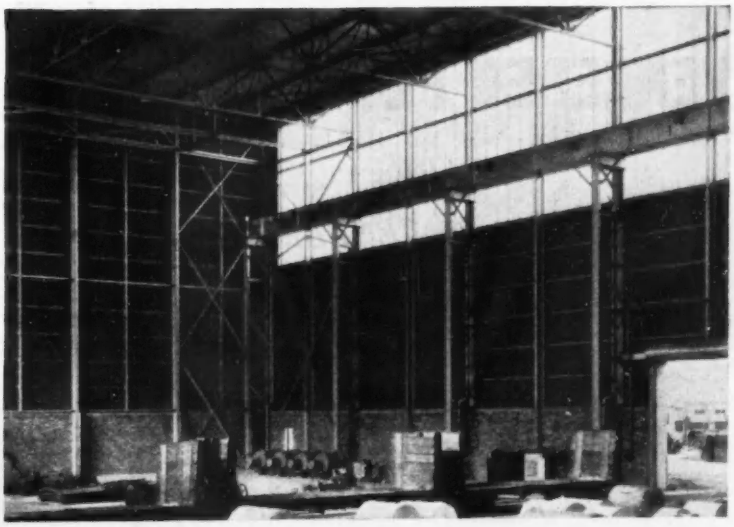

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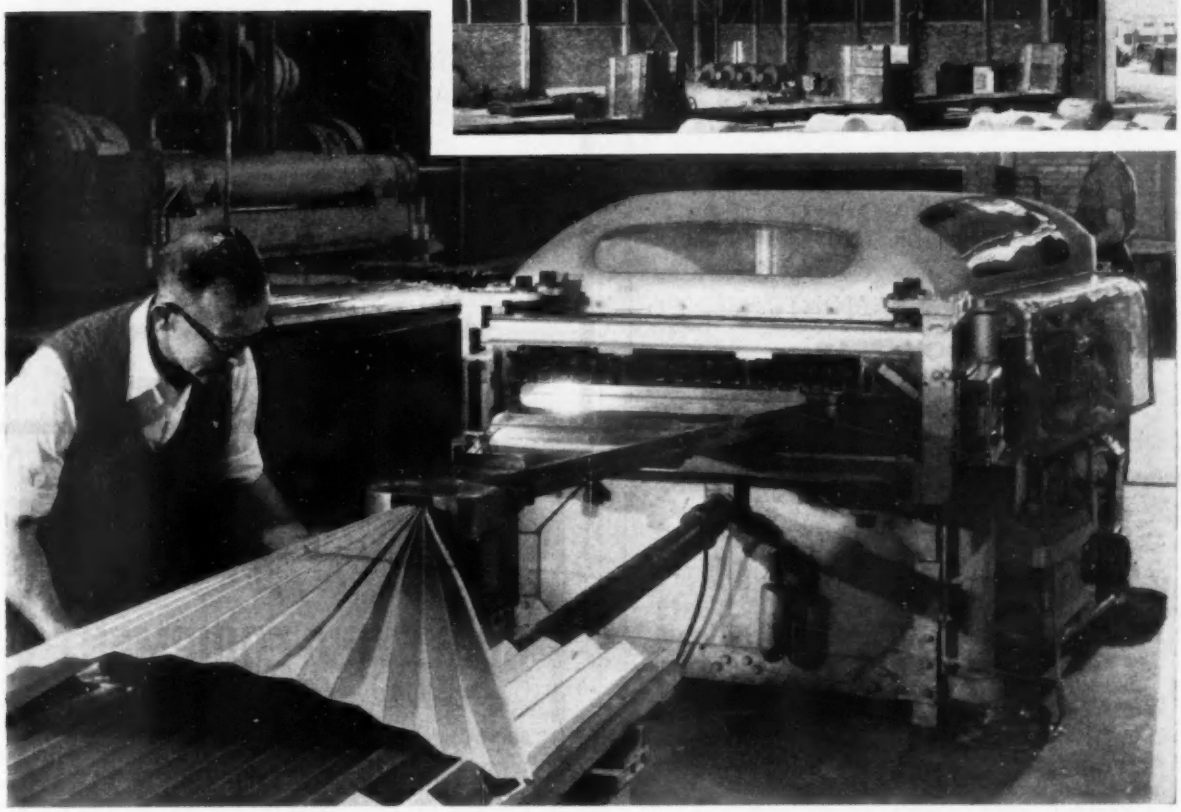

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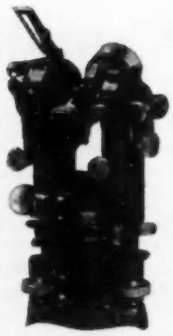

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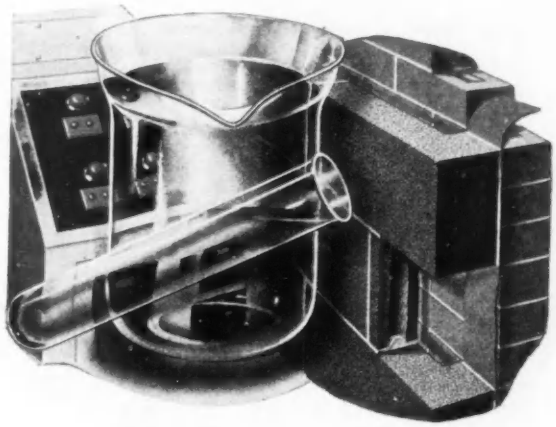

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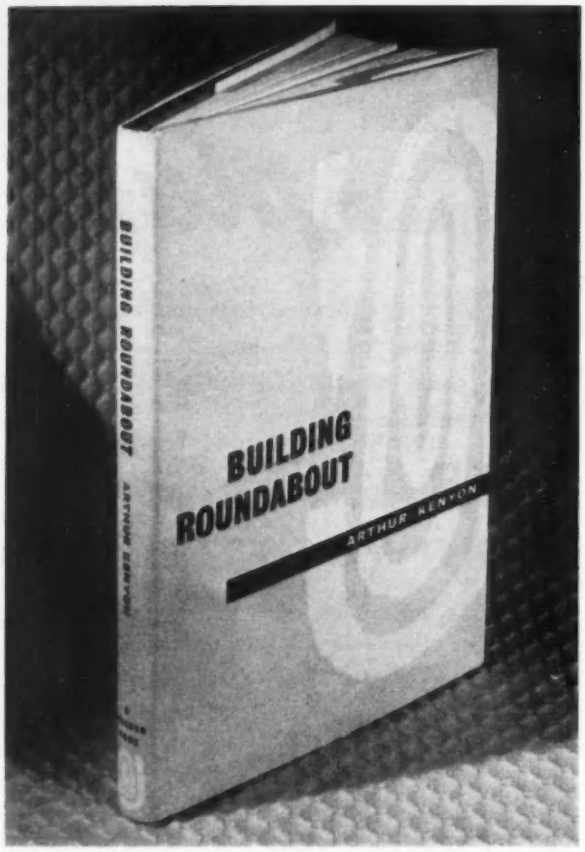

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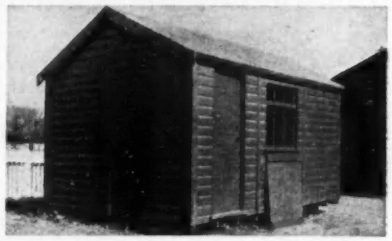

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ASSISTANT QUANTITY SURVEYORS, qualified A.R.I.C.S., Required. Luncheon vouchers, three weeks' holiday, superannuation scheme after probationary period. General duties with minimum supervision. Salary according to experience and ability.—Write, stating training and experience, to JOHN LEANING & SONS, Chartered Quantity Surveyors, 28 John-street, London, W.C.1.

ASSISTANT QUANTITY SURVEYOR for Chartered Quantity Surveyors, Victoria area. Salary up to £1,500, five-day week, pension scheme, permanent position.—Box 5730, "The Builder."

ASSISTANT QUANTITY SURVEYORS Required for large building contract in Oxfordshire. Experience of interim valuations, sub-contractors and measuring for final accounts. Write full details of age, experience and present salary to: Personnel Officer, M. J. GLEESON (CONTRACTORS), Ltd., Haredon House, London-road, North Cheam, Surrey, quoting Ref. 121.

QUANTITY SURVEYOR/ESTIMATOR Required for East London Builders.—Tel.: ROYal 1619.

EXPERIENCED QUANTITY SURVEYOR Required for responsible professional position. Excellent salary and prospects; pension scheme; luncheon vouchers.—Write, stating age, education, experience and salary required, to Box 941, "The Builder."

YOUNG CHARTERED QUANTITY SURVEYOR Required by small Holborn firm. Position offers wide experience of the profession working in close touch with the principals. Car driver/owner preferred. Good salary will be offered to the right man keen to advance his position in growing practice.—Box 5659, "The Builder."

QUANTITY SURVEYOR, with experience in Taking-off and Final Accounts, etc. Minimum intermediate standard, for small to medium-sized busy professional office with varied work. Permanent position with pleasant conditions and good prospects.—LESLIE W. CLARK & PARTNERS, 9 Richmond Buildings, Dean-street, W.1. GER 0775.

SHEFFIELD. SENIOR QUANTITY SURVEYOR Required by professional firm for Civil Engineering Contract near Sheffield. Salary £1,800 p.a., with car supplied, or equivalent allowance.—Please give age and full details of experience, to Box 5790, "The Builder."

SENIOR QUANTITY SURVEYOR Required by London firm of Quantity Surveyors. Good prospects with progressive firm.—Replies, stating age, experience and salary required, to Box 5792, "The Builder."

QUANTITY SURVEYOR Required, experienced in Taking-off and Settlement of Accounts, preferably A.R.I.C.S. or A.I.Q.S., and capable of working on own initiative with minimum supervision. The work, in a small office, is varied and interesting. Salary will be by arrangement, commensurate with ability. Annual holiday is three weeks, and this year's holiday arrangements will be honoured. A car allowance is payable.—Applications, in writing, giving brief details of experience and training, age, qualifications and salary range anticipated, should be forwarded to TURNER AND HOLMAN, Quantity Surveyors, 8 Blake-street, York.

CHARTERED QUANTITY SURVEYORS have a vacancy for an experienced TAKER-OFF/MEASURING SURVEYOR for large-scale civil engineering and building contract at Newport, Monmouthshire. —Please write, stating age, experience and salary required, to Box 5754, "The Builder."

CHARTERED QUANTITY SURVEYORS Require experienced MEASURING SURVEYOR for large civil engineering contract in North Kent.—Please write, stating age, experience and salary required, to Box 5755, "The Builder."

EXPERIENCED TAKER-OFF/MEASURING SURVEYOR Required by Chartered Quantity Surveyors for building and civil engineering contract in Scunthorpe.—Please apply, stating age, experience and salary required, to Box 5756, "The Builder."

EXPERIENCED SURVEYOR is Required by Chartered Quantity Surveyors for a large civil engineering contract in North Kent.—Please write, stating age, experience and salary required, to Box 5757, "The Builder."

CHARTERED QUANTITY SURVEYORS have vacancies for JUNIOR SURVEYORS for a large civil engineering contract in North Kent.—Please write, stating age, experience and salary required, to Box 5758, "The Builder."

CHARTERED QUANTITY SURVEYORS Require Qualified ASSISTANT to take charge of two-year contract in the Midlands, followed by senior position in London office. Minimum commencing salary £1,200 p.a. plus subsistence. Holiday arrangements respected.—Box 5764, "The Builder."

CHARTERED QUANTITY SURVEYOR Required to take charge of final account section of expanding practice in Westminster. Experience in cost control and price negotiation essential. Paid holiday this year. Salary range £1,250 to £1,500 p.a.—Box 5765, "The Builder."

CHIEF ASSISTANT QUANTITY SURVEYOR Required at a North Eastern Professional office. Applicants should be A.R.I.C.S. and should have had good experience in all branches of the profession. Staff control experience an advantage but not essential. Car allowance, salary according to ability and experience.—Apply, stating age and experience, to Box 5749, "The Builder."

SENIOR QUANTITY SURVEYORS Required, experienced in Taking-off, Valuations and Final Accounts, large and varied programme ahead, five-day week, overtime at time-and-a-quarter, car and tea allowance, three weeks' holiday per year, holiday this year considered, non-contributory pension scheme in operation.—Apply, stating age, experience and salary required, to FREDERICK IDDISON & JOHNSON, Quantity Surveyors, 27 Woodland-road, Darlington.

QUANTITY SURVEYOR Required for Site measurement, Taking-off, on varied contracts, Chartered Quantity Surveyors, Newbury. Salary £700-£800 according to age and experience.—Box 5746, "The Builder."

SURVEYORS

BUILDERS' ESTIMATING SURVEYOR Required near Reading. Experienced in dealing with estimates from enquiry to final account. Must be capable of organising and supervising his own jobs and working on his own initiative.—Reply giving full particulars of experience, references, age and salary required, Box 940, "The Builder."

SITE MEASURING SURVEYOR Required for contracts, 25 miles radius Basingstoke, permanent.—Write, giving full particulars, Box 982, "The Builder."

MEASURING SURVEYOR Required by Quantity Surveyors', Westminster, for work in the London area. Salary according to qualifications and experience and reviewed regularly. Luncheon vouchers, pension scheme.—Apply, stating age and experience, to Box 916, "The Builder."

SURVEYOR Required by London Quantity Surveyors mainly for measuring variations, preparation of interim valuations and final accounts for varied building contracts. Occasional travelling. Salary £900-£1,200 according to ability.—Please write, giving full particulars, to Box 990, "The Builder."

RESIDENT SURVEYOR wanted by London Quantity Surveyors for large contract in North West England, duration about three years. Must be very experienced and thoroughly acquainted with Final Account work. Details of experience, age, and salary required, to Box 993, "The Builder."

SITE MEASURING SURVEYOR Required for contracts Barnet, North London area. Permanent position.—Write details to Box 933, "The Builder."

CORNWALL, Falmouth. Contractor Requires COSTING/ESTIMATING SURVEYOR. Domestic Housing Estates. £900 approx. House or bungalow provided, pay rates only.—'Phone for appointment: TRUSTEEL CORPORATION (UNIVERSAL) Ltd., who will interview at Watford, Herts. (Watford 26256/7.)

PLASTERING CONTRACTORS in South-West London Require experienced MEASURING SURVEYOR. Good salary and permanent pensionable position for suitable applicant.—Write, stating age, experience and present salary, to Box 928, "The Builder."

TECHNICAL STAFF

required by

CARLTON

CONTRACTORS LIMITED

★

SURVEYORS

up to H.N.C. level, for Housing Contracts. Head Office and Site appointments. Also

JUNIOR SURVEYORS

with two to three years' experience.

SENIOR SURVEYORS

who wish to widen their experience by training as Estimators.

SITE ENGINEERS

for setting-out large Housing Contracts. Permanent appointments at substantial and progressive salaries, with participation in Bonus Scheme commensurate with individual effort, are offered. Pension Scheme after qualifying period.

★

Written applications, please, to Personnel Manager, with full details of training, previous employments and salaries.

CARLTON CONTRACTORS LTD.

CARLTON HOUSE,
ASHLEY ROAD,
EPSOM, SURREY

SURVEYOR

for the head office of
C. J. Sims Ltd.,
Building & Civil Engineering Contractors,
2 Victoria Street, S.W.1.

Age 28-35. Applicants must be experienced in all phases of building surveying, from site measuring to preparation of final accounts, including the building up of rates.

Apply in confidence giving age, complete details of training, experience and salary required.

SENIOR SURVEYOR

required by London Contractors, initially for contract in Home Counties.

Permanent position with excellent prospects. Holiday commitments honoured.

Apply in writing, stating age, qualifications and experience, to:

Box No. 5785, "The Builder."

SENIOR LAND SURVEYOR

A rapidly expanding Company of estate developers require the services of an experienced Land Surveyor and Planner to act as Chief Assistant to the Technical Director. Ability to produce imaginative sketch layouts and to negotiate with local authorities is essential. The successful applicant will be expected to undertake survey work if called on to do so, and to carry out administrative duties usually associated with such a position.

Salary by negotiation but not less than £1,000 per annum. Company car provided. Pension scheme in operation. Write giving full particulars to:

The Technical Director,
(Engineering & Surveying),
FEDERATED HOMES LTD.,
Federated House,
69, East Street,
Epsom, Surrey.

TERSONS LIMITED

require

A SENIOR SURVEYOR

for work in the London area.

With a view to permanency the successful applicant will be invited to join the Company's pension scheme after a satisfactory trial period.

This advertisement is aimed at a first-class man who is willing to work in a team. Every encouragement will be given for maximum effort.

Please write, giving full details of career and salary, quoting reference 'L.K.' All letters will be treated in the strictest confidence.

Tersons Limited,
Dollis Park, London, N.3

MEASURING SURVEYOR for interim valuations and final accounts Required by London Chartered Quantity Surveyors. Luncheon vouchers and non-contributory pension scheme.—Write, stating age, experience and salary required, to Box 973, "The Builder."

QUALIFIED BUILDING SURVEYOR or STUDENT approaching Finals with considerable office experience, Required in progressive West End Architect's office, to assist a group of Building Surveyors on estate layout, conversions and industrial work. Experience on land surveying and legal aspects an advantage. Ample opportunity of using initiative. Salary according to experience and qualification. Appointments by arrangement.—J. M. AUSTIN-SMITH AND PARTNERS, 29 Sackville-street, London, W.1. REGent 6183.

SURVEYOR Required in Central London C.Q.S. office for site measuring, valuations, accounts, etc. Salary £700, L.V.s, five-day week. Holiday this year.—Box 5656, "The Builder."

JUNIOR MEASURING SURVEYOR Required in Quantity Surveyors' office, Lincoln's Inn, to assist in preparation of interim valuations and final a/cs. on varied contracts. Good salary, L.V.s, holiday arrangements honoured.—Please send details to Box 5647, "The Builder."

BUILDERS' SURVEYOR/ESTIMATOR Required, capable of pricing, alterations and repairs off plans, specifications and bills.—Please reply, in writing, stating salary, age and experience, to JOHN JARVIS, Ltd., 46 Goods Station-road, Tunbridge Wells.

HUMPHREYS LIMITED

Building and Civil Engineering Contractors

require

TRAINEES IN SURVEYING

Young men 16—18 with not less than five subjects at 'O' level G.C.E. who wish to enter the building and civil engineering industry are offered the opportunity of training in all branches of Surveying. Good salary and conditions and assisted tuition schemes. School leavers at the end of the Summer term are particularly invited to apply for an early interview.

Apply in writing to:—

Personnel Department,
199, Knightsbridge, London, S.W.7.

SUNLEY

require

SITE SURVEYORS

Keen and capable contractors surveyors aged 27-34 offered progessive and pensionable permanent positions with National Contractors in the London Area. Excellent opportunities with scope for advancement to Senior posts at home and Overseas.

Apply **Chief Surveyor,**
Bernard Sunley & Sons Ltd.,
Sunley Works,
Hemel Hempstead, Herts.

SURVEYOR

For Site measuring valuations, operating bonus scheme and preparing material schedules.

Housing Contract, East London, 3½ years' duration.

APPLY:

W. J. JERRAM LIMITED
SANDFORD WORKS
EAST HAM.

HOWARD FARROW LIMITED

require Experienced

Measuring Surveyors

for Production Control. Apply by letter, stating age, experience and salary required to: Ref. B.W.G., Highfield Road, Golders Green, N.W.11.

COST SURVEYORS

urgently required by

HOLLOWAY BROTHERS (LONDON) LTD.

Applications are invited from persons having experience of site measurement, job planning and bonus schemes for work on Civil Engineering sites throughout the U.K.

Conditions of employment include Pension Scheme, three weeks' annual holiday, generous Sick Pay and Out of Town Allowances where applicable. Salary according to age and experience.

Applications giving full details of age and career to date should be addressed to—

THE SECRETARY,
157, Millbank, London, S.W.1

RUSH & TOMPKINS LIMITED

require

keen young

MEASURING SURVEYORS

to train as estimators for positions in a vigorously expanding department. These positions offer first-class salaries and excellent opportunities for advancement.

Applications, in writing, to be treated in strict confidence, to:

The Chief Estimator,
Rush & Tompkins Ltd.,
109 Station Road, Sidcup, Kent

RUSH & TOMPKINS LIMITED

require

SENIOR SURVEYORS

with experience of large building and civil engineering contracts to fill vacancies in their expanding Estimating Dept. Excellent salaries will be paid to successful applicants for these progressive positions.

Applications, in writing, to be treated in strict confidence, to:

The Chief Estimator,
Rush & Tompkins Ltd.,
109 Station Road, Sidcup, Kent

SENIOR BONUS SURVEYOR

required by progressive Building Firm in London area.

Salary in region of £1,200 per annum to man possessing right qualifications.

Pension scheme in operation.

Holiday arrangements for this year honoured.

Box No. 5697 "The Builder"

KYLE STEWART (CONTRACTORS) LTD.

require

SURVEYOR/ESTIMATOR

in department for work up to £30,000 in value. Applicants must be fully experienced in dealing with enquiries, site measuring and final accounts. Participation in Company's Bonus, Pension and Health Schemes and excellent opportunities for advancement. Car provided. Apply in writing stating age, experience and salary required to the

Managing Director,
Kyle Stewart (Contractors) Ltd.,
Ardshiel House, Empire Way,
Wembley, Middlesex.

MAINTENANCE SURVEYOR, age 22/27, London property company.—Write The Surveyor, Box 949, "The Builder."

JUNIOR SURVEYOR Required for progressive S.E. London builders to work under supervision but to use own initiative with a view to ultimately taking over responsibilities. Pension scheme and permanent appointment for suitable applicant. Write stating age, experience and salary required.—S. VARNEY & CO., Ltd., Credon House, Verney-road, S.E.16.

SURVEYORS Required by development company for work in their London and South Coast offices. Preferably experienced in material schedules, engagement and negotiation with sub-contractors. Non-contributory pension scheme.—Write giving details and salary expected, to BUNTING ESTATES, Ltd., 73 Acre-lane, London, S.W.2.

BUILDER'S SURVEYOR Required by Pipework specialists.—'Phone FELtham 3631 (Managing Director's Secretary) for appointment.

SITE COST SURVEYOR. Applications invited from fully-trained Surveyors for important positions on Building and Civil Engineering Contracts in the Midlands area. Applicants should have H.N.C. in building or L.I.O.B. and age range between 26-36 years.—Send full particulars, in confidence, to: Personnel Manager, WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

BUILDING SURVEYOR Required by progressive company in West London. Should have experience of site measurement, preparation of valuations and final accounts.—Write full details and salary required to Box 5716, "The Builder."

MEASURING SURVEYOR Required in Cardiff office for varied and interesting work. Duties would include site measurement, preparation of interim valuations, financial statements and final accounts. Pension and Sickness schemes available. Holiday arrangements honoured.—Reply, stating age, experience and salary required, to W. T. HILLS & CO., Chartered Quantity Surveyors, 3 Castle-street, Cardiff.

CUBITTS

APPOINTMENTS

— see pages 68 and 69

SURVEYORS AND ASSISTANT SURVEYORS

Experienced in speculative housing development required for position at the Head Office in Potters Bar. The positions offered are progressive, carry good salaries and excellent prospects. Write, stating age, experience, salary required to:

The Chief Surveyor,
McMANUS & CO. LTD.,
Orchard House,
Potters Bar, Middlesex.

SURVEYOR/ ESTIMATOR

Young Surveyor/Estimator required by B. & C.E. Contractors, near Manchester. Progressive and Pensionable position. Details of age, experience and salary required to:

Box J.250,
51, Station Road, Northwich,
Cheshire.

A. J. WAIT & CO. LTD.,

require

SENIOR & ASSISTANT SURVEYORS

for interesting Contracts in the London and Home Counties area. Salary commensurate with ability, bonus scheme, pension scheme. Permanency and prospects for the right applicants. Apply in writing, stating age, training, experience and salary required, to :

Chief Surveyor,
"Five Star,"
Kingston Road, New Malden, Surrey.

PLANNING and PROGRESSING Building and Civil Engineering Contracts. This vacancy calls for a training in the industry to H.N.C. or L.I.O.B. standard, with a full knowledge of B. of Q. specifications and drawings and some site organisation to prepare progress charts and schedules for new contracts.—Applications should state fully age and history, to WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

QUALIFIED SURVEYOR, aged 39, all-round first-class experience, Requires senior post with builder or professional firm, preferably with housing.—Box 5675, "The Builder."

LESLIE & CO. LTD.

require a

SURVEYOR

for senior position in the Production Control Department. Must be capable of operating existing bonus scheme. Knowledge of contract costing an advantage. Keenness and initiative essential.

Apply: *Secretary,*
LESLIE & CO. LTD.,
Peel Street, London, W.8.

QUANTITY SURVEYOR

Holoplast, Ltd., a Company in the Reed Paper Group, has a vacancy for a Quantity Surveyor.

Preference will be given to applicants, aged 20-30, with a knowledge of the building trade and of Quantity Survey procedure. Previous experience in a similar capacity is essential.

The position calls for a person with an enquiring and agile mind and a good all round education with G.C.E. "O" level.

Duties include the preparation of final accounts to specialist sub-contractors' building work and to carry them through to final agreement with Clients and their Quantity Surveyors.

Written applications with details of age, experience, present salary and position should be addressed to:—

The Group Personnel Officer,
ALBERT E. REED & CO. LTD.,
Larkfield, Nr. Maidstone, Kent,
quoting reference QS/HL/08.

MANAGING DIRECTOR'S ASSISTANT

Young Surveyor required as assistant to Managing Director of Estate Development Co. with expanding programme. Knowledge of Estate Development not essential, but keenness, ambition, imagination and desire are.

Preference given to L.I.O.B., H.N.C., etc. New car provided. Full particulars.

Box No. 5780, "The Builder"

Y. J. LOVELL (LONDON) LTD.,

require a

JUNIOR SURVEYOR

who would initially be trained to assist with the bonus on a £1,500,000 Contract in Central London. This post would provide an opportunity to gain site experience with good prospects.

Apply: **General Manager,**
Y. J. LOVELL (LONDON) LTD.,
4, Endsleigh Gardens,
London, W.C.1.

BUILDING SURVEYORS

required for expanding organisation in Sussex. Applicants should have good technical background and be experienced in all phases of surveying. Initial duties may involve planning, administration or site progressing. Excellent opportunities for young keen surveyors to go forward with a modern Company, holiday arrangements honoured, good salary and bonus.

Apply to:

Box No. 5374 "The Builder"

THOMAS LOWE & SONS LIMITED

have a vacancy for a

BUILDING SURVEYOR

in their Birmingham Office. Must be capable of dealing with interim certificates, bonusing, final accounts, etc., on contracts up to £200,000. Car mileage allowance given, also assistance if necessary in obtaining accommodation. Staff Pension Scheme available after satisfactory probationary period. Applications should be, in the first place, in writing to:

Gazette Buildings,
Corporation Street, Birmingham 4,

stating age, qualifications and salary required.

PRACTICAL BUILDER'S SERVICE

require first class surveyor for final account work.

Applications giving full details of experience, age, salary required, etc. to:

23 Leighlands, Pound Hill,
Crawley, Sussex.

ASSISTANT SURVEYORS

JACKSON & EDMONDS, London, have vacancies for ASSISTANTS to work on civic and university buildings, swimming pools, industrial and military buildings. Preference given to candidates with enthusiasm as well as skill; overtime, luncheon vouchers, pension scheme and paid time-off for further study go with a salary in the range of £650-£1,250.—Write, or telephone, JACKSON & EDMONDS, 30 Gloucester-place, London, W.1. (HUNter 1485.)

BUILDERS' ASSISTANT MEASURING SURVEYOR with knowledge of War Dept. Schedule Required for S.E. London area. Give full details of age and experience, etc. Existing holidays honoured.—J. GARRETT & SON, Ltd., Balham Hill, S.W.12. TUL 1261.

SENIOR BONUS SURVEYOR

required for 4-year Contract in Central London

also

TRAINEE BONUS SURVEYOR

Apply: **General Manager,**
Y. J. LOVELL (LONDON) LTD.,
4, Endsleigh Gardens,
London, W.C.1.

COST AND BONUS SURVEYOR

Required for London area building contracts. Must be fully conversant in measuring all trades.

Apply giving details of age, experience etc. to:

Box No. 5715, 'The Builder'

ASSISTANT SURVEYOR Required by Development Company for work on the South Coast. Should be experienced in site measuring and valuations for sub-contractors and should have some experience in the preparation of material schedules. Excellent opportunity for right person. Non-contributory pension scheme.—Write giving details and salary expected to Box 5642, "The Builder."

ASSISTANT SURVEYOR Required in Builders' office. Work varied and interesting, including site measurement, valuations and field work.—Please reply to NORMANS HOUSING (BEXLEYHEATH), Ltd., 1-6 Carlton-parade, Orpington. Tel: ORP 31303.

ASSISTANT BUILDING SURVEYOR Required by firm of Private Architects in Manchester.—Apply, stating qualifications, experience and salary required. Box 5705, "The Builder."

A. E. A. PROWTING LIMITED

require an

ASSISTANT SURVEYOR

fully versed in taking off quantities and material schedules for Housing and Flat developments.

Also required is a:—

MEASURING SURVEYOR

to deal with site measurements on the above type of developments in addition to normal Contracts, used to dealing with sub-contractors of all trades.

Both posts are permanent and pensionable after probationary period and the successful applicants will be based at our Head Office.

Salaries by arrangement. Applicants for both posts should be in possession of a Driving Licence.

Apply in writing to:—

Breakspear House, Bury Street, Ruislip, Middx.

HUMPHREYS LIMITED

require several

ASSISTANT SURVEYORS

to work in teams each comprising a Senior, Assistant and Trainee Surveyor.

Permanent positions based on London office will allow young men of initiative and ability to make full use of all the modern techniques employed by the Company.

The excitement of unearthing another MITHRAS TEMPLE cannot be guaranteed but opportunities exist for working on major building works where the degree of responsibility for Surveying work will be governed only by the ability of the individual.

Apply in writing, stating age, experience and salary required, to:

Personnel Department, 199 Knightsbridge, S.W.7.

ASSISTANT SURVEYOR

required by London Building Contractor. Applicants should be capable of measuring and agreeing Sub-Contractors accounts, measuring Variation Orders, and preparing Valuations.

Apply stating age, experience, and salary required to:

Messrs. Griggs & Son Ltd.,
56, Victoria Street,
Westminster,
London, S.W.1.

MAPLE & CO. LTD.

Have vacancies in the Building & Decorating Department for

ASSISTANT ESTIMATING SURVEYOR

specialising in high-class decoration, joinery & conversions.

DRAUGHTSMAN

Preferably with knowledge of conversions and maintenance.

These are permanent staff positions with excellent prospects, superannuation and free life assurance.

Candidates should apply by letter, stating age, experience & present salary to

Staff Director,
Maple & Co. Ltd.,
Tottenham Court Road, W.1.

ASSISTANT SURVEYOR

required in West Middlesex area.

Applicant must be experienced in all phases of surveying and in agreeing final accounts. Opportunity to understudy Estimator. Full details to

Box No. 5788 "The Builder"

ASSISTANT SURVEYOR

required

for the head office of Building & Civil Engineering Contractors in Westminster. Age 20-25. Applicants must be experienced in all phases of building surveying, from site measuring to assisting with preparation of final accounts. Apply, in confidence, giving age, complete details of training, experience and salary required to:

C. J. Sims Ltd.,
2 Victoria Street, S.W.1.

ASSISTANT SURVEYOR Required for a National Estate Development Organisation. Opportunity for keen young man looking for a post with a first-class future. Some experience in estimating and buying preferred but not essential.—Apply to McMANUS CONSTRUCTION (NORTHERN) Ltd., Wigton-lane, Alwoodley, Leeds, 17.

ASSISTANT SURVEYOR, experienced in speculative housing development, Required for position at the head office in Potters Bar. The position offered is progressive, carries a good salary and excellent prospects.—Write, stating age, experience and salary required, to the Chief Surveyor, McMANUS & CO., Ltd., Orchard House, Potters Bar, Middlesex.

JUNIORS

JUNIOR TRAINEE QUANTITY SURVEYOR Required by Westminster Quantity Surveyors.—Write, giving particulars, to Box 958, "The Builder."

YOUNG MAN. Opportunity for an opening for a Youth not exceeding 18 years of age, in an old-established builders' office near London Bridge, to learn the trade. Preference to a person with some previous experience of a Builders' office.—Write, fully, Box 5700, "The Builder."

JUNIOR Required in West End office of BOND, FOSTER & PARTNERS.—Write, giving particulars, to 19 Hertford-street, Park-lane, W.1.

YOUTH

required as trainee in Contracting department.

Good educational standard essential. Excellent prospects. Please apply in writing to—

Secretary,
Permanite Limited,
455, Old Ford Road, Bow, E.3.

TAKERS OFF

TAKERS-OFF, Final standard, Required by Quantity Surveyors, Westminster. Good salary, luncheon vouchers. No Saturdays.—Apply, Box 929, "The Builder."

SENIOR TAKER-OFF for responsible position in busy Quantity Surveyors' office, Westminster. Salary commensurate with responsibility. Luncheon vouchers, pension scheme.—Brief details to Box 931, "The Builder."

TAKERS-OFF Required in Chartered Quantity Surveyors' office on work which is varied in nature. Good salaries will be paid to persons who will maintain the high professional standard of the office. Luncheon vouchers, pension and life insurance schemes in operation.—Apply by telephone, Chancery 5841, Reference S.D.M., or in writing, to Box 910, "The Builder."

TAKER-OFF

required by progressive London Contractors. Permanent position with excellent prospects. Holiday commitments honoured. Apply in writing, stating age, qualifications and experience, to :

Box No. 5786, "The Builder."

SUNLEY

require a

SENIOR TAKER-OFF SURVEYOR

to be based at their Hemel Hempstead Offices. This is a senior and permanent appointment with a large and expanding National Building Contracting organisation where the prospects are exceptional. Assistance with housing will be given if necessary and salary will be commensurate with experience and ability.

Applications to

Chief Surveyor,
Sunley Works,
Maylands Avenue,
Hemel Hempstead. Herts.

TAKERS-OFF and MEASURING SURVEYORS Required by London Chartered Quantity Surveyors. Luncheon vouchers and non-contributory pension scheme.—Write, stating age, experience and salary required, to Box 977, "The Builder."

TAKERS-OFF Required by London firm of Chartered Quantity Surveyors. Good opportunities to acquire wide and varied experience for those who have passed the R.I.C.S. Final Examination during the last five years, or those of similar standard.—Write for interview, giving age and experience, to Box 5504, "The Builder."

TAKERS-OFF Required by London Quantity Surveyors opening branch office in Croydon area for varied projects including settlement of accounts. Overtime at increased rates. Non-contributory pension scheme. Holiday this year.—Write, stating age, experience and salary required, to Box 5507, "The Builder."

TAKER-OFF Required in professional office in Victoria for both Taking-off and settlement of accounts. Commencing salary £900-£1,200, according to ability. Overtime at increased rates. Non-contributory pension scheme. Holiday this year.—Write, stating age and experience, to Box 5509, "The Builder."

SENIOR TAKER-OFF Required in medium-size professional office in Victoria for varied and interesting projects from Taking-off to settlement of accounts. Commencing salary £1,400. Increased rate for overtime. Non-contributory pension scheme. Holiday this year.—Write, stating age and experience, to Box 5510, "The Builder."

EXPERIENCED TAKERS-OFF Required for professional offices in the East Croydon area. Salary according to qualifications and experience. Luncheon vouchers. Contributory pension scheme.—Apply, with brief details, to Box 921, "The Builder."

TAKERS-OFF Required by London Quantity Surveyors. Salary scale £900-£1,500 per annum, according to ability, plus overtime.—Please write, giving details of experience, age, etc., to Box 5569, "The Builder."

LONDON firm of Chartered Quantity Surveyors Require fully qualified SENIOR TAKER-OFF. Please give full particulars and state salary required.—Box 5613, "The Builder."

JUNIOR TAKERS-OFF Required by Chartered Quantity Surveyors near Victoria Station. Excellent opportunities for advancement. Two weeks' holiday this year.—Write, giving age, experience and salary required, to Box 5766, "The Builder."

TAKERS-OFF Required West End office. Good prospects for advancement for Final standard applicants. Holiday this year. Luncheon vouchers.—Write, stating age and experience, to Box 5747, "The Builder."

JUNIOR TAKER-OFF Required, with minimum of one year's Taking-off experience. Opportunity for advancement in new practice.—Please write, stating age, experience and salary required, to BISHTON AND DOREE, Chartered Quantity Surveyors, 4 Sheet-street, Windsor, Berks.

LONDON firm of Chartered Quantity Surveyors Require a SENIOR ASSISTANT for a permanent position with a high level of remuneration. Luncheon vouchers and pension scheme.—Please apply, giving details of age, experience and salary required, to Box 5759, "The Builder."

SENIOR ASSISTANT Required by London firm of Chartered Quantity Surveyors. Salary up to £1,700 per annum, according to age and experience. Luncheon vouchers and pension scheme.—Please apply to Box 5760, "The Builder."

JUNIOR TAKER-OFF Required by London firm of Chartered Quantity Surveyors. Salary £750-£1,000 for five-day week. Luncheon vouchers, overtime payments and pension scheme.—Please apply, stating age and experience, to Box 5761, "The Builder."

TAKER-OFF of Intermediate to Final standard Required, Chartered Quantity Surveyors, Newbury. Salary £700-£800.—Apply in own handwriting stating age and experience to Box 5745, "The Builder."

A. S. WILSON AND PARTNERS, Chartered Quantity Surveyors. Require TAKERS-OFF and WORKERS-UP in London and Provincial branches.—Apply, stating experience, to 8 Storey's-gate, Westminster, S.W.1.

TAKERS-OFF Required by Chartered Quantity Surveyors in Westminster. Permanent position. Five-day week, luncheon vouchers, pension and Life Assurance scheme. Holiday this year.—Please write, Box 5787, "The Builder."

JUNIOR TAKER-OFF Required by Midlands firm of Quantity Surveyors. Good experience with progressive firm.—Replies, stating age, experience and salary required, to Box 5791, "The Builder."

APPLICATIONS are invited by small firm of Chartered Quantity Surveyors (London) for the following posts: (1) SENIOR TAKER-OFF to take charge of section. Must be willing to accept responsibility. (2) TAKER-OFF (R.I.C.S. finals standard). This post also offers scope for seeing contracts through all stages including final accounts. Please write, giving details of previous experience.—Box 5733, "The Builder."

JUNIOR TAKER-OFF and SITE MEASURER with experience Required by Sussex C.Q.S. Five-day week. Write stating age, experience and salary required.—Box 5797, "The Builder."

TAKER-OFF, R.I.C.S., or similar, Required for West End office of BOND, FOSTER & PARTNERS. Age 30 years.—Please apply in writing, stating salary required, to 19 Hertford-street, W.1.

JUNIOR TAKER-OFF, of Intermediate standard, Required by Birmingham Chartered Quantity Surveyors.—Apply, stating age, experience and salary required, to HARRIS, ROURKE & SIMPSON, 191 Corporation-street, Birmingham, 4.

CHARTERED QUANTITY SURVEYORS Require JUNIOR TAKER-OFF for Rochester office. Five-day week. Reply stating age, experience and salary required.—Box 5626, "The Builder."

TAKER-OFF Required by Quantity Surveyors in Gloucester. Pension and sickness insurance scheme. Five-day week.—Reply, stating age, qualifications and salary required, to Box 5662, "The Builder."

CHARTERED QUANTITY SURVEYORS near Victoria station, Require qualified TAKER-OFF to work mainly on estimating and cost planning for varied and interesting projects. Permanent appointment with Superannuation scheme. Luncheon vouchers. High salary offered with six-monthly reviews.—Write full particulars to Box 5684, "The Builder."

JUNIOR TAKERS-OFF and MEASURING SURVEYORS Required by firm of Chartered Quantity Surveyors in the North Midlands to work at head office or branch offices at Stafford or Banbury. Salary according to experience. Five-day week. Participation in non-contributory pension scheme after period of satisfactory service, in addition to the state scheme.—Apply, giving full particulars and salary required, to Box 5670, "The Builder."

JUNIOR TAKER-OFF with at least three years' experience Required by S.W.1 firm of Chartered quantity Surveyors. Varied and interesting projects. Superannuation scheme, luncheon vouchers.—Write full particulars and salary required to Box 5685, "The Builder."

WORKERS UP

WORKERS-UP Required, Senior and Junior, for office of Chartered Quantity Surveyors in the Holborn area. Box 950, "The Builder."

WORKERS-UP Required by London Chartered Quantity Surveyors for permanent staff. Luncheon vouchers.—Write, stating age, experience and salary required, to Box 979, "The Builder."

SENIOR WORKER-UP Required by Chartered Surveyors, Westminster, to take charge.—State experience, age and salary required, to Box 5502, "The Builder."

WORKERS-UP Required by London Quantity Surveyors opening branch office in Croydon area. Good prospects; overtime at increased rates; non-contributory pension scheme; holiday this year.—Write, stating age, experience and salary required, to Box 5508, "The Builder."

JUNIOR WORKER-UP Required in Central London C.Q.S. office. Salary £600-£700, L.V.s, five-day week. Holiday this year.—Box 5657, "The Builder."

CHARTERED QUANTITY SURVEYORS with West End practice offer post giving maximum opportunity for progress and advancement to WORKER-UP with at least 3 years' experience.—Telephone for interview HYD 5522.

WORKER-UP with not less than 3 years' experience Required in Quantity Surveyors' office, Lincoln's Inn. Good salary and overtime rates, L.V.s. Opportunity for advancement. Holiday arrangements honoured.—Write Box 5646, "The Builder."

WORKER-UP Required by Chartered Quantity Surveyors near Victoria Station. Good salary. Luncheon vouchers, superannuation scheme; holiday this year.—Box 5615, "The Builder."

WORKER-UP, approaching intermediate standard, who wishes to start site measurement. Small office in London, near Liverpool Street Station. Salary £400-£500 plus bonus.—Box 5596, "The Builder."

WORKERS-UP Required, Senior and Junior. Good salaries. Luncheon vouchers. Holiday this year.—Please reply, stating age, experience and salary required, to Box 5748, "The Builder."

CHARTERED QUANTITY SURVEYORS Require WORKER-UP for long-term contract at Newport, Mon.—Please write, stating age, experience and salary required, to Box 5762, "The Builder."

LONDON firm of Chartered Quantity Surveyors have vacancy for WORKER-UP. Permanent position, luncheon vouchers, pension scheme, overtime paid.—Please write, stating age, experience and salary required, to Box 5763, "The Builder."

CHARTERED QUANTITY SURVEYORS in Euston district Require JUNIOR ASSISTANT for progressive position. Salary £1,000.—Write, experience and present employment, to Box 5556, "The Builder."

TEMPORARY full-time, experienced WORKER-UP Required for 2 to 3 months by City office, 12/- per hour. Unlimited hours may be worked.—Box 5742, "The Builder."

ASSISTANT WORKER-UP for Chartered Quantity Surveyors, Victoria area. Salary up to £1,000, five-day week, pension scheme, permanent position.—Box 5729, "The Builder."

WORKER-UP with at least two years' experience Required by Chartered Quantity Surveyors.—Reply, stating age, experience and salary required, to STANLEY YOUNG & CO., 25 South Molton-street, W.1.

WORKER-UP Required by Quantity Surveyor's Dept. of major London industrial concern. Interesting work and good prospects. Salary by arrangement.—Box 5701, "The Builder."

WORKER-UP, between First and Intermediate R.I.C.S. examinations, Required in small office of London Chartered Quantity Surveyors.—Please telephone REGent 2171.

WORKER-UP Required in small to medium-sized busy professional office. Permanent position with pleasant conditions and opportunities for advancement. With or without taking-off experience.—LESLIE W. CLARK & PARTNERS, 9 Richmond Buildings, Dean-street, W.1. GER 0775.

ENGINEERS

F. BRADFORD & CO., Ltd., have vacancies for reinforced CONCRETE DETAILERS. Salary according to experience and ability. Five-day week. Staff bonus and pension schemes. Canteen facilities.—Application in writing to F. BRADFORD & CO., Ltd., Eley Estate, Angel-road, Edmonton, N.18.

RESIDENT ENGINEER

urgently required for Industrial Building Contract in Isleworth. Duration of contract approximately two years. Minimum salary £1,200, depending on previous experience. Applicants should apply in writing, stating age and experience, to :—

FREDERICK S. SNOW & PARTNERS,
"ROSS HOUSE,"
144, Southwark Street,
London, S.E.1.

The following Fully Experienced Personnel are required for

LARGE MOTORWAY CONTRACT

in the North West Area.

This is an important contract and only top-class men should apply.

Vacancies are available on the permanent staff of this Company which is a well established and expanding organisation.

Excellent conditions, Pension Scheme and of course Good Salaries.

Setting Out Engineers	...	**Ref. 113.**
Section Foremen ...	...	**Ref. 114.**
Foreman Carpenters	...	**Ref. 115.**
Cashier Timekeepers	...	**Ref. 116.**
Cost and Bonus Clerks	...	**Ref. 117.**
Daywork Clerks ...	...	**Ref. 118.**
Storekeeper/Checkers	...	**Ref. 119.**

Reply with full details of experience, age etc., to:

Box No. 5616 "The Builder"
quoting appropriate ref. no.

ENGINEER/SURVEYOR Required for work on large-scale housing development. Applicants must have both drawing office and site experience. Possession of current driving licence essential. Pension scheme, staff canteen.—Apply: Office Manager, TAYLOR WOODROW HOLMES, Ltd., Western House, Western-avenue, Ealing, W.5.

SITE ENGINEER Required. Used to setting-out to roads and sewers on large housing sites. Top salary to right man.—Apply, in writing, A. E. BARRETT & CO., Birchwood-avenue, Lincoln.

QUANTITY SURVEYING ASSISTANTS

Vacancies exist for

TWO WORKERS-UP

having not less than three years' experience in a professional office.

Duties will involve abstracting, billing, some work on final accounts and specification writing.

Salary within the range of £585/785 per annum.

Five day week, time off for recognised course of study.

The posts are superannuable, subject to medical examination.

Applications stating training, age and experience to:—

R. C. STEEL, A.R.I.B.A.,
Chief Architect,

Co-operative Wholesale Society Ltd
99, Leman Street,
London, E.1.

IMPERIAL CHEMICAL INDUSTRIES LIMITED
WILTON WORKS

requires

YOUNG GRADUATE CIVIL ENGINEERS

to work on design and construction on a new and developing large-scale chemical manufacturing site.

While successful candidates will be appointed initially to work in this field, experience in other fields will be planned with a view to the achievement of senior managerial positions.

Write, giving brief details of age, qualifications and experience, quoting Reference No. 613, to:

The Engineering Director,
Imperial Chemical
Industries Limited,
Wilton Works,
Middlesbrough,
Yorks.

SITE CIVIL ENGINEERS/SURVEYORS. We invite applications from young men trained and with experience on several contracts in successfully setting out for buildings, foundations, and external services, etc., for several interesting building contracts. Good terms and conditions will be offered with prospects for rapid promotion in return for accuracy, keenness and initiative.—Apply to, WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

ESTIMATORS

ESTIMATOR Required by B. & C.E. contractors near Manchester. Progressive and permanent position.—Full details of age, experience, and salary required, to Box J.250, 51 Station-road, Northwich, Cheshire.

ESTIMATOR Required for Metal Windows, Lantern Lights, Steel Partitions. Canteen facilities. Five-day week.—Write, stating particulars and salary required, to Secretary, LUXFER, Ltd., Waxlow-road, Harlesden, N.W.10.

ESTIMATOR Required for London Painting and Decorating contractors. Would consider ASSISTANT ESTIMATOR.—Apply, giving details of age, experience, salary required, etc., Box 5618, "The Builder."

ESTIMATOR/SURVEYOR wanted by firm of Stonemasons. Must have good knowledge of restoration and new work, setting out experience an advantage. Able to drive. Assistance regarding accommodation. Excellent opportunity for man with initiative and desire to progress. South Coast firm. Reply, stating age, experience and any other helpful information. All replies will be confidential.—Address to Managing Director (Personal) c/o Box 5611, "The Builder."

ESTIMATOR/ SURVEYORS

Required by an expanding Building Contractor for Contracts mainly in greater London area. Must be experienced and responsible for surveying matters from Enquiry to Final Account. These posts offer interest, permanency, and scope to men with ability, energy and initiative. Pension Scheme, five day week, holiday arrangements honoured. Write in first instance to: **Box No. 5640 "The Builder".**

GALBRAITH BROS. LTD.

require a

SENIOR BUILDERS' ESTIMATOR & SURVEYOR

Excellent opportunities and well paid position to fully capable man. All types and sizes of contract.

Apply (in writing):
The Managing Director,
Crayford Bridge,
Crayford, Kent.

J. M. JONES & SONS LTD.

require

ESTIMATORS

These are additional Senior appointments and include Small Works Department and Major Contracts. Staff Pension and Life Assurance Schemes. Assistance with housing if necessary. Apply with details of age, education, training, qualifications if any, to the Secretary:

J. M. Jones & Sons Ltd.,
Highway Works, Maidenhead.

Applications are invited for an unusually attractive vacancy

for a

SENIOR ESTIMATOR

for a large

BUILDING AND CIVIL ENGINEERING CONTRACTORS

in the Midlands. Applicants should be of A.R.I.C.S. or A.I.Q.S. standard and should have extensive past experience, at a senior level, in the establishment and administration of a modern estimating—and costing system for all types of building work.

Preference will be given to men with particular experience in reinforced concrete (including pre-stressed and post-tensioned structures), bridges, and/or minor road-works. The Company is self-contained to a large degree and does very little Sub-contracting.

The successful applicant will be based at the Company's Headquarters at Stoke-on-Trent (an industrial centre in rural surroundings), and he will be expected to live nearby. Assistance with housing can be given, after probationary period. His responsibilities will also cover costing and estimating for the Company's depots in other provincial centres, and for its London activities. There are prospects of further advancement of Senior Management status within the Company. This post requires not only sound estimating and costing experience as outlined above, but also the drive, initiative and sense of responsibility to develop estimating and costing into one of the major control functions of the Company. Preferred age is 30 to 40 years.

Apply in first instance to :

A. G. HAYEK & PARTNERS LTD.,
Management Consultants and Industrial Engineers,
Federation House, Stoke-on-Trent.

giving fullest particulars of past experience and indicating salary requirements.
Candidates' names will NOT be disclosed to client before first interview.

RUSH & TOMPKINS LIMITED

require a

SENIOR ESTIMATOR

Applications are invited from experienced men capable of estimating for building and civil engineering projects of £500,000 and over. This senior position carries an excellent salary and other benefits.

Applications, in writing, to be treated in strict confidence, to:

The Chief Estimator,
Rush & Tompkins Ltd.,
109 Station Road, Sidcup, Kent

ESTIMATOR/ SURVEYOR

required by London Specialists in adaptation, conversion and decoration.

Attractive salary. Participation in pension scheme after period of satisfactory service. Car provided, or car allowance. Existing holiday arrangements honoured. Reply, stating age and experience to

Box No. 5368, "The Builder"

SHOPFITTING ESTIMATOR

required

Fully experienced in pricing all types of shopfitting.

Apply, with full details of past experience and salary required, to:

Managing Director,
STANLEY JONES & CO. LTD.
STOWE ROAD,
SHEPHERDS BUSH, W.12.

ESTIMATOR/SURVEYOR Required for large and small Contracts, East London and Essex area. Incentive scheme operating. Car provided. Apply, stating age, experience and salary required. Good prospects for the right man.—HAINES & WARWICK, Ltd., 12 Bradford-road, Seven Kings, Essex.

ESTIMATOR/MANAGER, Jobbing and Small Works, to control and develop this department of small builders, N. London. Responsible to M.D. Essentials are quick, accurate estimating; experience in similar capacity; ability and desire to progress; cost-consciousness. Salary £1,000 plus. If you qualify, please write and tell us why.—Box 5776, "The Builder."

THE LONDON FERRO-CONCRETE CO. LTD.

require a

SENIOR ESTIMATOR

experienced in tendering for building and civil engineering work.
Pension Scheme.

Housing—Details at interview.

Apply giving full details, age, experience, and salary required, to—

Chief Estimator,
The London Ferro-Concrete Co. Ltd.,
Maxted Close, Hemel Hempstead, Herts.
Telephone: Boxmoor 3810

ESTIMATOR

required by

Asphalt & Felt Roofing Contractors

Previous experience an advantage but not essential. Good prospects. Please write stating age and salary required to Secretary,

Permanite Limited,
455, Old Ford Road, Bow, E.3
or telephone Mr. A. V. Barber ADV 4477

ESTIMATOR Required by old-established and rapidly expanding firm of Building and Civil Engineering Contractors. Candidates must have had at least 10 years' successful experience in tendering for contracts up to £500,000 both in Building and Civil Engineering, and be fully conversant with modern methods of analysis of rates and be capable of working with minimum supervision. Assistance with housing if required.—Apply (in confidence) giving full details of experience, age and salary required, to WM. EAVES & CO., Ltd., Vicarage-lane, Blackpool.

ESTIMATOR WANTED for expanding Builders' business, with at present 80-100 operatives.—Apply, T. HEADLEY, Middle-street, Ashford, Kent. Telephone: Ashford 1010.

ESTIMATOR/SURVEYOR Required by old-established Building company for contracts up to £50,000, in London and greater London area.—Apply, giving full particulars of experience, age and salary required, to Box 5703, "The Builder."

ESTIMATOR for Architectural Aluminium based on Joinery principles. Will train suitable tradesman or juniors. Holiday arrangements honoured.—AJAX ALUMINIUM, Ltd., Lower Sydenham, S.E.26. SYD 3222.

FULLY qualified ESTIMATOR/SURVEYOR seeks senior position with contractors in Southern England. Minimum salary £2,000 p.a.—Box 5674, "The Builder."

BUILDERS' ESTIMATOR/MANAGER. House-building and small repair work. Some contract work.—Box 5668, "The Builder."

QUALIFIED ESTIMATOR Required in Norwich Head Office of medium-sized Civil Engineering Contractors. Must be experienced in all branches and capable of planning project at tender stage. A permanent, pensionable position.—Write with full particulars of experience and qualifications, and stating salary required, to MAY, GURNEY & CO., Ltd., Trowse, Norwich.

ESTIMATORS. Estimator Required by Precast Concrete Manufacturers. Some basic experience essential.—Write to STUARTS GRANOLITHIC CO., Ltd., Northcote-road, Stechford, Birmingham, stating details of age, salary, etc., which will be treated in confidence.

MANAGERS

BUILDING CONTRACTORS, offices Brighton, Require fully experienced CONTRACTS MANAGER, housing and flat contracts.—Apply, giving full particulars of past experience, Box 962, "The Builder."

CONTRACTS MANAGER. ASSISTANT Required E.11 area. Good prospects for man with drive and initiative in expanding firm.—Full particulars of previous experience, salary required, etc., to Box 4978, "The Builder."

ASSISTANT TO MANAGER. An excellent opportunity is offered to a young man by a firm of Builders and Decorators in the West End of London. A knowledge of estimating and preparing accounts for alterations, decorations and jobbing work is required.—Write stating age, experience and salary required, to Box 905, "The Builder."

JOINERY MANAGER Required for medium-sized builders in South East London. Required to do setting-out. Mainly first-class work. Drive and initiative essential.—Write for interview, stating age, experience and salary required, to Box 5767, "The Builder."

WORKS MANAGER

REQUIRED

Fully experienced, capable of taking full responsibility and achieving economic completion. The work covers all aspects of the Building Industry. Annual output £140,000. Staff 100.

Salary : £1,495.
Superannuation.
Three weeks' annual holiday.
Generous sickness payment.

Written applications on special form to be obtained from and on completion returned to :—

Secretary and Executive Officer,
YORK CO-OPERATIVE SOCIETY LTD.,
22, Railway Street,
York.

Closing date : 1st July, 1961.

A 75

A. H. ANDERSON LIMITED

has on hand throughout the United Kingdom an extensive programme of schools, office blocks, hospitals and other buildings, employing its method of construction known as A.75, and requires the following staff:—

(1) CONTRACTS MANAGER

An experienced man between the ages of 30 and 40 is required to take full responsibility for the successful running of a group of contracts. Salary between £1,000 and £1,250 according to experience, plus car and expenses allowance.

(2) SURVEYOR

An experienced man is required who has a real interest in the application of cost planning and is able to produce bills of quantity for minor projects. He will be responsible for the compilation of estimates and general surveying duties. Salary £1,000 to £1,250 according to experience.

(3) ASSISTANT SURVEYOR

A young man is required who wishes to join an office in which he will obtain experience in a wide range of surveying duties. Salary £600 to £800 according to experience.

These posts offer opportunities in an expanding Company, in which team work is real, and a profit-sharing scheme expresses the management's outlook.
Applications in writing to

The Managing Director,
A. H. Anderson Limited,
58 Victoria Street, S.W.1,
or telephone applications may be made to The Managing Director's Personal Secretary, at *Tate Gallery* 2192.

THE ADVISORY SERVICE FOR THE BUILDING INDUSTRY

has been retained to advise on the appointment of a

CONTRACTS MANAGER (H.21)

responsible to the Managing Director for all Construction Work on Contracts and Estates together with the operation of the Joinery Works, Yard and Plant.
Applications are invited from men in the 32/45 age group who have a sound knowledge of Modern Management Techniques such as planning, work study and incentives. The successful applicant will also consult with the Company's Architect and Estimator on Construction Methods at pre-tender or design stage.
The Company operates in the Bristol area. A car or allowance will be provided and the initial salary will be related to experience and ability.
Reply in confidence, in the first instance, stating age, education, qualifications, experience and salary required to

B.A.S., 82, New Cavendish Street, London, W.1.

Old-established well-known South East London building contractors under new management and rapidly expanding, requires

SENIOR CONTRACTS MANAGER

with a view to Directorship after suitable probationary period. Preferably surveyor trained and must possess drive and energy and be prepared to work hard.

Box No. 5744, "The Builder."

MANAGING DIRECTOR'S ASSISTANT

Young Surveyor required as assistant to Managing Director of Estate Development Co. with expanding programme. Knowledge of Estate Development not essential, but keenness, ambition, imagination and desire are.

Preference given to L.I.O.B., H.N.C., etc. New car provided. Full particulars.

Box No. 5780, "The Builder"

JOHN LAING CONSTRUCTION LIMITED

requires

MEN

with a technical knowledge of BUILDING CONSTRUCTION and QUANTITIES, for the Central Buying Department at Mill Hill.

The work consists of taking off quantities from documents, preparing ordering schedules, and issuing orders and sub-contracts, for Building and Civil Engineering contracts throughout the country.

There are good prospects within the organisation, including a Pension Scheme and other progressive benefits.

Applications are invited from men studying for H.N.C., L.I.O.B., or A.I.Q.S., or those who have already qualified; and from men with relevant experience in the building industry but without qualifications.

Apply in writing giving brief details to the **Group Personnel Manager (S.B.4),**
John Laing & Son,
London, N.W.7.

ADDITIONAL BUILDER'S CONTRACTS MANAGER

Aged 35/45 required for old established, medium sized Builder and Contractor South Manchester. Previous experience in similar position essential. Permanent and Pensionable after satisfactory service. Car provided. Salary range £1,050/£1,250 according to experience and ability. Write in confidence with full particulars to
Box No. 5665 "The Builder."

BUILDING AGENT—

CONTRACT MANAGER

Substantial national building and civil engineering contractors require one or two men in thirty to early forties age group who could confidently undertake the duties of Site Agent on building contracts of the order of £1,000,000.

Necessary qualifications include technical training and wide experience; a successful record; energy, good health and willingness to put the job first; ability to manage; foresight.

Successful candidates would be appointed Agents on contracts, and after evidence of successful performance, there would be opportunities of promotion to Contract Manager based on London office.

Commencing salary in range £1,500-£3,000 depending on the man. Pension.

These are excellent career opportunities for individuals who can make them so. All replies treated in absolute confidence.

Please write to:

Box 5686 "The Builder".

REEMA CONSTRUCTION LIMITED

require a

CONTRACTS MANAGER

for a group of Contracts in the LONDON AREA

Applications are invited from persons with previous and successful experience in a similar capacity, and who are progressively interested in a modern system using large scale pre-cast concrete units, with particular advantage on multi-storey work.

Write in confidence with full particulars of experience, qualifications and age to:

Contracts Director,
Milford Manor,
Salisbury

SALES MANAGER

To promote, organise and take full control of NEW LAMINATE BOARD DIVISION of well known Plastic Manufacturers. Opportunity for experienced man to achieve Director level quickly. Own staff advised.

Write

Box No. 5681 "The Builder."

MACADAM SURFACING DEPARTMENT. A first-class opportunity occurs in the Midlands area for an energetic young man with a good knowledge of Bituminous and Asphalte Surfacing contracts. Prospects of eventual control of department and appropriate salary to successful applicant.—Applications to Managing Director, BIRMINGHAM ASPHALTE AND PAVING CO., Ltd., 25 Whitmore-road, Small Heath, Birmingham 10.

GENERAL MANAGER

for

ESTATE DEVELOPMENT COMPANY

The successful applicant will be 35/45 with at least 10 years experience of this aspect of the Building Industry.
To manage this company he will have:

a sound knowledge of land, building and quantity surveying;

ability to deal with architects, planning authorities and legal matters;

confidence in controlling site agents, dealing with sub-contractors, planning work-loads etc.

He will be offered:
a salary commensurate with the responsibility, car, pension rights and the usual fringe benefits. Appointment to the Board after a probationary period.

The headquarters of the Company is on the London/Kent border and assistance with housing is available if necessary.

Apply, in confidence, in the first instance to **The Advisory Service for the Building Industry, 82, New Cavendish Street, London, W.1.**

BUILDING & ESTATE DEVELOPMENT NEWCASTLE UPON TYNE

Keen, energetic young man wanted, Assistant to Managing Director. Wide knowledge all technical/financial aspects Building Industry essential. Commencing salary £1,250/£1,350. Car provided. Accommodation could be arranged. Apply in confidence, with full details to:

Box No. 5630, "The Builder"

SHOPFITTING:

Established Company of Provincial Shopfitters invite applications for a Managerial position

Candidates should possess a first class knowledge in all aspects of the industry, in design, with the practical knowledge of construction, including estimating and costing.

The appointment offers considerable scope for advancement to an ambitious man between 35 and 45 years of age, with a good commencement Salary.

Application with full details of past experience and references, which will be treated with strict confidence.

Apply:

Box No. 5704 "The Builder"

PARTITIONING MANAGER Required by well-known South London building contractors to form department. Preferably experienced with knowledge of sales and building estimates, prepare schemes. Partition has already been successfully marketed and contracts are present running.—Box 5789, "The Builder."

Applications are invited from suitably experienced men in the age group 28—40, for a position as

ASSISTANT CONTRACTS MANAGER

on varied building work, to operate in North West England. Transport provided. Attractive salary, with excellent future prospects.

Apply Box No. 5683 "The Builder."

MANAGER wanted for West London Building Contractors on medium-sized contracts. Excellent scope and prospects for man with necessary qualities to execute contracts from estimate to completion. Write in confidence giving full details of experience, references and salary required. Profit-sharing considered.—Box 5725, "The Builder."

BUILDERS' MERCHANTS Require MANAGER for new Depot, Sutton, Surrey, area, with house available in few weeks' time. Essential to have knowledge of both light and heavy sides of trade and capable of conducting business without supervision. This situation calls for a thoroughly experienced and honest man and will command a salary accordingly.—Apply in writing, with full details, to Box 5717, "The Builder."

UNUSUAL OPPORTUNITY arises owing to the creation of a new executive position as ASSISTANT to the Technical Director of an expanding firm long established in the Pre-fabricated Building Industry. The job involves supervision of outside contracts and the applicant must be technically qualified to conduct negotiations at a high level. Four figure salary with car. Bonus and pension scheme.—Write, without delay, to me personally, B. E. Crysell, Technical Director, T. BATH & CO., Ltd., 41 Norwood-road, S.E.24. Tel: TUL 6241.

Manager required

Building and Civil Engineering Contractors, Berkshire. Medium-size Contracts, Industrial, Business Premises, Shops, Own Joinery Works. Applicant must have experience of Site Organisation, Contract Management, Estimating, Surveying. Able to supervise staff. Give fullest details of previous experience, references, salary expected.

Box No. 5632, "The Builder"

CLERKS OF WORKS

CLERK OF WORKS. with experience of reinforced concrete and steel structures and foundation works. Required for project in North-East London.—Write, giving particulars of experience and salary required, Box 5617, "The Builder."

CLERK OF WORKS Required for large contract in South-West Middlesex. Experience of reinforced concrete and high-class joinery an advantage.—Apply, in writing, giving full details and salary required, to W. S. HATTRELL & PARTNERS, 21 Cleveland-place, St. James's, S.W.1.

CLERK OF WORKS Required for Leeds contract of £150,000. Applicants should have had considerable experience, preferably with Agents' experience.—Write Box E.3981, WHITES, 72/78 Fleet-street, London, E.C.4.

CLERK OF WORKS Required for hospital project in London, S.W.3, area. Immediate start has been authorised.—Please write full particulars, with names of two referees, to LANCASTER & LODGE, 10 Woburn-square, London, W.C.1.

CLERK OF WORKS. Experienced Clerk of Works Required for important alteration work in Central London. Office replanning; lift installation; remodelling, heating, ventilating and lighting systems. Contract 5 to 18 months. Substantial salary to first-class man.—SCOTT & BARLOW, 10 Gray's Inn-square, W.C.1.

OPPORTUNITY for retired CLERK OF WORKS or Senior Foreman to supervise works on part-time basis, preferably with car. North Hampshire.—Apply Box 5743, "The Builder."

BUYERS

BUYER Required for small but expanding builder's office in Middlesex area, to organise and control all materials for upwards of 50 houses annually. Must have good systematic methods.—Write stating usual details and salary required, to Box 5719, "The Builder."

BUYER Required for the London office of an established firm of Building and Civil Engineering Contractors. Experience essential.—Please reply, giving full details of previous employments, etc., to Box 5673, "The Builder."

Two energetic

ASSISTANTS

required for Buying and Contracts Dept. age 19–22 with technical background of building industry. Time will be allowed off to complete studies and holiday arrangements for this year may be kept. These posts are open to young men who have ambition to progress to more senior positions in the future.

Apply to:

General Manager
T. & B. (St. Albans) Ltd.
69 Victoria Street,
St. Albans, Herts.

EXPERIENCED BUYER

required for Contractors office. Surveyor trained preferred. Full details, including salary required, to:

Box No. 5561, "The Builder"

BUYING ASSISTANT, surveyor-trained, Required by large expanding company of estate developers.—Write, stating age, experience and salary required, to the Buyer, McMANUS & CO., Ltd., Orchard House, Potters Bar, Middlesex.

ASSISTANT BUYER, salary £6/700 p.a. for right man, Required by Building and Civil Engineering Contractors.—Apply Mr. R. S. Cox, HOWARD FARROW, Ltd., Highfield-road, Golders Green, N.W.11. MEA 3232 (office) or FIN 0769 (home).

REPRESENTATIVES

PUMP MANUFACTURERS wish to appoint an AGENT for Midlands and Southern Counties to specialize in sales of electro-submersible drainage pumps. Proven ability to sell and first-class connections throughout the area are essential.—Write Box 5666, "The Builder."

CERAMIC GLAZED TILES. We Require a REPRESENTATIVE who has proven connections with the Architectural profession. The age limits are within the range 28/35. Remuneration is by way of basic salary and commission. A car is provided and there is a non-contributory pension scheme in force.—Apply to Box 5699, "The Builder."

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Assistant Representatives

Many young men who have gained experience in the Building Trade and who possess initiative and drive feel that their ambitions can only be satisfied by making selling their career.

An appointment for Surrey is now offered to such young men, age 23–26, to join the sales organisation of Austins of East Ham, selling Standard Wood Windows, Doors and Kitchen Units.

After initial training at Head Office suitable candidates will be given outside experience.

Apply to Sales Director,
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UNIVERSAL SHOPFITTING CO. (London) LTD.

require additional

REPRESENTATIVE

having established clientele to produce £60-80,000 p.a.

Effective backing given. Holiday arrangements honoured

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required to sell Bricks on Commission, in Gloucestershire, Worcestershire and Herefordshire. At least 5 years' contact with the Building Trade essential. Write with full details of past experience to The Secretary,
Shakemantle Quarry Company Ltd.,
Cinderford, Glos.

REPRESENTATIVES. Midlands area Precast Concrete Manufacturers Require Representative with background knowledge of work in this field. Applicants must be experienced in dealing with Architects and clients.—Write to STUARTS GRANOLITHIC CO., Ltd., Northcote-road, Stechford, Birmingham, stating details of age, salary, etc., which will be treated in confidence.

BUILDERS' ASSISTANTS

ENERGETIC, AMBITIOUS YOUNG MAN, age 20-26 years; G.C.E. "O" level; knowledge of joinery or building trades advantage, to train as PERSONAL ASSISTANT to Director.—Apply, in writing, stating experience and salary required, DAVIES BROS., Ltd., 225 Lea Bridge-road, Leyton, E.10.

TRAINEE BUILDER'S ASSISTANT Required, aged 18/22. Assist Manager. To train as Estimator/Surveyor with progressive medium-size Builders and Contractors. Education: G.C.E. standard preferred.—Write GEO. JARVIS & CO., Ltd., 58 Church-street, Weybridge, Surrey.

BUILDERS' ASSISTANT Required to prepare Estimates from Bills of Quantities and Plans; assist generally with supervision and office work, with old-established firm. Would consider giving suitable applicant interest in the business.—Apply BOYCE, Odiham, Hants.

YOUNG MAN

Required by Estate developers and Building Contractors in South East Essex with experience of setting out Roads, Houses, etc. including proficiency with dumpy level. Varied interesting and progressive position for person with drive and initiative. Please reply to

Box No. 5740 "The Builder"

ASSISTANT

age 22–35, required for Premises Department. Must be able to prepare schemes, specifications, carry out surveys and be a good draughtsman. A knowledge of Interior Design desirable. Good commencing salary, with additional Bonus. Pension Plan.

Please write giving fullest details of age, experience, etc., to:

Personnel Manager,
The National Cash Register Co. Ltd.,
206/216 Marylebone Road,
London, N.W.1.

TROLLOPE & COLLS LIMITED.

invite applications for:

AN ASSISTANT PLANNING OFFICER

with site experience, knowledge and application of planning techniques, including work study.

The position is permanent and pensionable and the salary will be commensurate with responsibility.

Applications, giving full particulars of qualifications, experience and salary required, should be sent to:

The Assistant Secretary,
Trollope & Colls, Limited,
One, Noble Street, Gresham Street,
London, E.C.2.

AGENTS

WANTED: AGENTS for Duromit Industrial Floor Tiles, all districts.—MACNAB PAVING Ltd., Grove-road, Hitchin, Herts.

FIRST-CLASS SITE AGENT; also GENERAL FOREMAN Required for contract about to commence in the Middlesex area.—Write, Box 1042, c/o MURRAY & PHELAN, Ltd., Columbia House, Aldwych, W.C.2.

SITE AGENT/SENIOR GENERAL FOREMAN Required for contract in Kent. Applicants must have good all-round experience. Knowledge of pre-planning would be an advantage. Good salary. Staff conditions after probationary period.—Apply: ABBEY HOMESTEADS, Ltd., 15 Thayer-street, W.1.

DRABBLE CONSTRUCTION LTD.

require

AGENTS

FOR housing, factory and school contracts in South Midlands area. Must be capable of taking complete charge of contracts. Superannuation scheme in operation.

Write, giving details to:

Managing Director,
Drabble Construction Limited,
1 Cannon Street, Wellingborough,
Northants

Tel: W'boro' 3441

Y. J. LOVELL (London) LTD.,

require an

AGENT/GENERAL FOREMAN

For a large contract in Central London.

Applicants must have had recent experience in Precast Concrete Construction.

Apply:

General Manager,
Y. J. Lovell (London) Ltd.,
Thorne House,
Endsleigh Gardens, London, W.C.1

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Building Division

require

Building Agent

Applicants must be fully experienced in all aspects of the trade, possess drive and initiative, have sound knowledge of planning and progressing.

The appointment is permanent, a superannuation scheme is available after a probationary period. Apply in writing stating age, education, training, experience, and salary required to

Howard Farrow Limited,
Highfield Road,
Golders Green Road,
London, N.W.11.
Ref. JAB.

GLEESON

require

SENIOR AGENT

in

LONDON AREA

for very large building contract. Must have considerable experience of reinforced concrete frame construction. Applications are invited only from men who have progressively developed in large contract supervision, emphasising a successful production record.

To the man who can satisfy these requirements, a substantial salary is offered. In addition, the Company operates bonus and pension schemes.

Please apply in writing, stating age, qualifications and employment history, to :

Personnel Officer (112),
M. J. GLEESON (CONTRACTORS) LTD.,
Haredon House,
London Road,
North Cheam, Surrey

Kyle Stewart (Contractors) Ltd.,

require

AGENTS & GENERAL FOREMEN

in London and Home Counties, for contracts between £100,000 and £500,000 in value. Must be experienced in all aspects of the trade, possess drive, initiative and up-to-date knowledge of mechanical plant management. Preferably C. and J. Participation in Company's bonus and pension scheme. Car allowance. First-class salary offered to successful applicants.

Apply in writing, stating experience and present salary, to :

Managing Director,
Kyle Stewart (Contractors) Ltd.,
Ardshiel House, Empire Way, Wembley,
Middlesex.

AGENT

required for large Contract in Hendon area. Experience in reinforced concrete work essential. Excellent prospects for right man with this progressive Company.

Apply with full details of age, qualifications and experience to:

The Secretary,
TERSONS LTD.,
Dollis Park, Finchley, N.3,
quoting reference A.V.

AGENT/GENERAL FOREMAN

Required for newly formed Company dealing in Estate Development. The Company has big plans for the future, and what is more important the "know how" and finance to carry these plans through. This is an opportunity to get in on the ground floor and progress with the organisation. Drive and initiative are essential, and will be adequately remunerated.

Box No. 5751 "The Builder"

FOREMEN AND SUPERVISORS

GENERAL FOREMAN Required for contracts. Greater London area. Good prospects for first-class men with drive and initiative.—Full particulars, including salary, etc., to Box 916, "The Builder."

GENERAL FOREMAN Required, housing contracts, Alton and Newbury.—Apply, giving full particulars, DRURY CONSTRUCTION, Ltd., 4 Farncombe-road, Worthing.

GENERAL FOREMAN Required. Good prospects, superannuation, transport provided. Must be experienced in reinforced concrete and building work.—Please apply, in writing, stating age, experience and salary required, J. L. EVE CONSTRUCTION CO., 17 Hillside, Ridgway, Wimbledon, S.W.19.

SUPERVISOR for West End Builders engaged upon small contract and jobbing works.—Applications from thoroughly experienced persons, stating salary, to Box 5491, "The Builder."

FIRST-CLASS GENERAL FOREMAN Required for high-class public building, traditional construction. Croydon area.—Apply, in writing, giving details age, contracts executed and salary required, to GRACE & MARSH, Ltd., New Bridge Works, Waddon, Croydon.

FIRST-CLASS GENERAL FOREMAN Required for good-class contract. Experience in Reinforced Concrete Construction essential. Croydon area.—Apply, in writing, giving details age, contracts executed and salary required, to GRACE & MARSH, Ltd., New Bridge Works, Waddon, Croydon.

SENIOR GENERAL FOREMAN Required for large flats contracts. Initially N.E. London area. Applicants must have proven record and drive to command top salary. Permanent and pensionable position.—Write with full details to WARD AND PATERSON, Ltd., 7 Welbeck-street, London, W.1.

GENERAL FOREMAN Required for contracts in London and Maidstone, Kent.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

APPLICATIONS INVITED from BUILDING CRAFTSMEN, preferably with craft technological certificate and O.N.C. for inclusion in company's training scheme for general foremen. Applicants should be under 25 years of age and willing to travel in United Kingdom. Good prospects and permanency for selected men.—Apply, in writing, with details of experience to date, to Box 5638, "The Builder."

SENIOR GENERAL FOREMEN Required by national Contractor for contracts situated in London and South of England. Applicants must be experienced in reinforced concrete construction. Only keen and ambitious foremen capable of earning good annual bonus by results need apply. Good conditions and pension scheme operating.—Apply in writing, giving details of experience to date, to Box 5639, "The Builder."

GENERAL FOREMAN Required immediately for small housing contract in the St. Albans area, and other work.—Please apply, stating age, experience and salary required, to E. S. MOSS, Ltd., 159 Brent-street, Hendon, N.W.4.

TWO GENERAL FOREMEN Required for good quality private Maisonette and Flat development; about £40,000; Cheshunt and Harpenden, Hertfordshire. Commencement late June/early July, initially nine months' duration. Interested applicants please write, giving brief particulars of experience, past employment, age and salary required, to C. CATCHPOLE, Leighton House, Potters Bar.

COMPETENT GENERAL FOREMAN Required for contracts £50,000 upwards. Holiday arrangements honoured.—Write, stating age, salary, experience, to W. R. OLDHAM, Ltd., 471 Southend-lane, S.E.26.

GENERAL FOREMAN Required to control section of 3-year housing contract, East London area. Excellent prospects for successful applicant.—Write, stating age, trade, experience and when free, to WM. J. JERRAM, Ltd., Sandford Works, East Ham, E.6.

Young, ambitious

TRADE FOREMAN

OR

ENGINEER

Required for large contract at Rotherham to act as assistant to site manager. This is a good opportunity to advance to site manager level for men able to prove themselves.

Apply:
J. GERRARD & SONS, Ltd.,
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GENERAL FOREMAN/SUPERVISOR Required by old-established firm adjacent to City for supervision of small works. Carpenter and Joiner by trade for preference.—Write, stating age, experience, and salary required, to Box 5750, "The Builder."

GENERAL FOREMAN Required by old-established Contractors for South West London work. Permanent position for right man.—Apply, stating age, experience, previous employers and salary required, Box 5753, "The Builder."

GENERAL FOREMAN Required. Must be fully experienced and have knowledge of reinforced concrete work; medium-size warehouse-type building.—Apply, in writing, to R. J. TRUSCOTT, Ltd., Cranmer-road, E.7.

GENERAL FOREMEN

required for large Contracts in North West London. Experience in reinforced concrete work essential. Good prospects for right men, with excellent initial salaries.

Apply with full details of age, qualifications and experience to:

The Secretary,

TERSONS LTD.,

Dollis Park, Finchley, N.3,

quoting reference A.V.

GENERAL FOREMAN

A public company, already well established in the industry, having recently formed a new general building unit within their organisation, require a first class all trades General Foreman for, initially, building projects up to £500,000. He should, preferably, be relatively young for the position, and have first class concentrated experience of the detailed planning and execution of contracts approaching this size. His enthusiasm and drive should match that of the unit which he will join, which places the utmost emphasis on personal efficiency and the high quality of managment at all levels. The position is permanent and pensionable; the salary is good, as are the future prospects.

Please write with full details of your career to date to

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Required by rapidly expanding London Contractors. Contracts up to 1 million pounds. Knowledge of planning technique and cost control essential. The position is progressive. Conditions first class and top salary will be paid for right man. The prospects are excellent for an energetic and ambitious man.

Box No. 5726, "The Builder".

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Shops and Flats development.

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invite applications from

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for interesting contracts in

Hemel Hempstead and Barnet

Permanent positions with progressive Company.

Apply in writing giving full details to—

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CHALFONT STATION ROAD,

AMERSHAM

THOMAS LOWE & SONS LTD.

have vacancies for

GENERAL FOREMEN

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Gazette Buildings,

Corporation Street, Birmingham 4,

stating age, qualifications and salary required.

CUBITTS

APPOINTMENTS

— see pages 68 and 69

GENERAL FOREMEN Required for Contracts in Essex.—Apply, in writing, to THOMAS BATES AND SON, Ltd., The Old Brickworks, Harold Wood, Essex.

FIRST-CLASS GENERAL FOREMAN Required for School Contract in Reading, due to commence July. Excellent prospects and conditions for successful applicant.—Apply, giving age, experience and salary required, to TILBURY CONSTRUCTION CO., Ltd., Ruscombe Works, Twyford, Berks.

GENERAL FOREMAN C. and J. by trade, for two medium-sized contracts, South Bucks area. Prefabricated timber construction. Applicant preferably car owner/driver.—Apply in writing, stating age, experience and salary required, to W. J. SIMMS SONS & COOKE, Ltd., Sherwood House, Beddington-lane, Croydon, Surrey.

GENERAL FOREMAN for multi-storey Flats contract, Croydon area.—Apply in writing, to W. J. SIMMS SONS & COOKE, Ltd., Sherwood House, Beddington-lane, Croydon, Surrey.

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FOREMAN (Finishing Trades) Required in West Middlesex, South Bucks area. Able to control upwards of 50 houses annually on several sites, preferably car owner driver.—Write giving references, usual details and state salary required, to Box 5718, "The Builder."

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SUPERVISOR Required for our Small Works Branch at Beckenham. Driving licence essential. We require a man preferably with experience of this field, or extensive knowledge of a suburban builder's business and biased towards structural work and repairs.—Write or telephone and we will send a form for your details: The Director, R. MANSELL, Ltd., 23 Grant-road, Croydon. ADD 2226.

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require

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Urgently, for roads and sewers work to estate developments. Must be competent in the use of level and setting out work, site supervision and management. Permanent appointment. Ring Potters Bar 7121 or write to the Chief Engineer.

E. J. WARNER & PARTNERS LTD.
Orchard House,
Orchard Parade,
Potters Bar, Middlesex.

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required to supervise multi-storey reinforced concrete frames. Apply

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Winchester 4951.

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required for contracts in the London area. Application, stating age, salary required, and full details of past experience, to:

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Ford & Walton Ltd.,
Walton House, London, E.15.

BUILDING MAINTENANCE SUPERINTENDENT

(non-resident)

required for Fleet Street office block of about 100,000 sq. ft. Applicants need not be professionally qualified. Experience of similar type of work desirable and sound knowledge of building practice, heating and electrical engineering, estimating, and drawing, essential. Will be required to organise work and control full-time staff of 30/35 and part-time cleaning staff of 40. Post is permanent and pensionable. Applications with details of experience and starting salary required to:

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GENERAL FOREMAN Required for new school in Faringdon, Berks. £95,000.—Apply stating age and experience, to H. J. KNAPP & SONS, Ltd., Stanford-in-the-Vale, Faringdon, Berks.

GENERAL FOREMAN Required for flats conversion in Chelsea, about £100,000.—Write, giving details of age, experience, salary required and when available, to Box 5692, "The Builder."

GENERAL FOREMAN Required for supervision of small works, London area. Car owner.—Apply, stating age, experience and salary required, to Box 935, "The Builder."

APPLICATIONS are invited for the position of SITE SUPERVISOR, by a leading manufacturer of prefabricated timber buildings, to take charge of sites in South and South-West England. Good knowledge of timber construction and building essential. Must have current driving licence. Pension scheme in operation.—Write, giving details of experience, to Site Works Manager, MEDWAY BUILDINGS & SUPPLIES Ltd., Phoenix Wharf, Rochester, Kent.

CARPENTERS AND JOINERS

JOINER with thorough knowledge of the trade required to take charge of small, newly equipped with modern machines, Joiners' shop for medium-size Contractors. Knowledge of estimating an advantage.—Write stating age, experience and salary to Box 927, "The Builder."

CLERKS

SALES OFFICE ASSISTANT/ORDER CLERK Required by head office of Builders' Merchants. Some knowledge of facing brick trade an advantage.—Write, stating age, experience and salary required, to Box 913, "The Builder."

WAGES AND COST CLERK

(Senior) required, must be fully experienced, good salary paid. Apply stating age, details of experience and salary required to The Secretary, **C. Miskin & Sons, Ltd., Romeland House, St. Albans, Herts.**

COST CLERK Required for medium-size West End office, able to prepare small accounts.—Apply in writing stating age and salary required, to Box 966, "The Builder."

BUILDERS' CLERK. Experienced essentially in costing and accounts suiting West End Builders. Opportunity for estimating.—Write, personal details and salary required, to ROBERT MOUSLEY, 3 Little Portland-street, W.1.

BUILDER'S CLERK Required to deal with increased costs, dayworks, etc. Good salary and working conditions.—Write in first instance to the Chief Surveyor, A. E. SYMES, Ltd., Albert House, 236/252 High-street, Stratford, E.15.

CLERICAL ASSISTANT Required to keep progress records, undertake simple correspondence and attend upon principal. Applicants should be conversant with terms used in the building trade and previous experience in an architect's or builder's office would be an advantage. Five-day week, staff canteen, superannuation, etc.—Apply in writing, giving full details, salary required, age and experience, to The District Architect, F. W. WOOLWORTH & CO., Ltd., 1264 London-road, Norbury, S.W.16.

ORDER CLERK, able to handle book-keeping and general office routine.—Fullest details and salary to Managing Director, SINCLAIR & SON (LONDON), Ltd., 786/790 Seven Sisters-road, N.15.

COSTING CLERK, with experience of prime costs and increased costs. Required in Westminster Quantity Surveyors' office, capable of checking contractors' fluctuation claims. Luncheon vouchers, contributory superannuation fund.—Apply, stating age experience and salary required, to Box 969, "The Builder."

BUILDERS' CLERK for old-established firm. Good prospects, pension scheme.—Write, stating age, experience and salary required, NORMAN & BURT, Ltd., London-road, Burgess Hill, Sussex.

ACCOUNTS CLERK for old-established Builders, N.W. Surrey. Excellent opportunity for young man of good experience. Pension scheme. Holiday commitments honoured this year.—Full details, in confidence, Box 5628, "The Builder."

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CLERK (Male) Required for Builders' Merchants (light side of trade), general clerical duties. Previous experience not essential, but good opportunities to learn trade. Salary according to age and experience. Holiday arrangements honoured.—Write, giving details of age, etc., to the Secretary (Dept. B), BROAD & COMPANY, Ltd., 4 South Wharf, London, W.2.

TIMEKEEPERS and SITE CLERKS wanted by well-known Building and Civil Engineering Contractors for Contracts in Hertfordshire and London areas.—Write or 'phone for interview: R. W. J., HARRY NEAL, Ltd., 117 Baker-street, London, W.1. WEIbeck 8544.

WORKS CLERK Required to assist Yard Manager in planning deliveries and to record movements of goods.—Write STEPHENS & CARTER, Ltd., 731/761 Harrow-road, London, N.W.10.

ACCOUNTS OFFICE ASSISTANT (Senior) experienced to Trial Balance and with knowledge of Costing, Required by Civil Engineering Contractors. Permanent, pensionable appointment.—Write stating age, experience and salary required, to Chief Accountant, FITZPATRICK & SON (CONTRACTORS), Ltd., 455 Old Ford-road, London, E.3.

SITE CASHIER. Applications invited for the above position for vacancy in Midlands area. The position is one of much responsibility and calls for a fully experienced man previously holding similar position with National Contractor on large Contracts and has been covered by Fidelity Insurance. Must be reasonably mobile. Good terms and conditions offered to suitable man. Age range about 28 to 46 years.—Apply in confidence to WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

PUBLIC COMPANY in S.W. London engaged in specialist field in Building industry has vacancy for capable applicant either male or female, to undertake the financial aspect on contracts. Write giving details of experience and salary required.—Box 5702, "The Builder."

MALE CASHIER Required for Builders and Contractors. Experience of hourly paid employees essential. Excellent prospects and conditions. Superannuation scheme.—Write, stating age, experience and salary required, to Box 5698, "The Builder."

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Young man required by progressive firm of Building Specialist Sub-Contractors in S.E. London. Applicants should possess an Accountancy qualification, have a good commercial background and be able to justify promotion to Company Secretaryship in a few years time. Work is interesting and varied and some previous Building trade experience is desirable. Non-Contributory Pension Scheme in operation. Apply in own handwriting stating age, experience and salary expected to:

Box No. 5696 "The Builder"

CLERK, male or female, Required for simple costing, typing, invoicing, operate small switchboard, Building Contractors, S.W.8. Write, stating age experience, salary required.—Box 5694, "The Builder."

TIMEKEEPER and WAGES CLERK. Good opening for advancement in other Depts. Previous building experience not essential. Staff canteen. Pension.—Apply JAMES CARMICHAEL (CONTRACTORS), Ltd., BATtersea 1154.

BUILDER'S GENERAL CLERICAL ASSISTANT Required for company at Isleworth. Must be experienced in the following: Costs and accounts, P.A.Y.E., wages, and experience of book-keeping, buying and materials progressing. Experience of quantities and taking-off will also prove an advantage. First-class opportunity exists in a modern company for a keen man not afraid of hard work.—Applications, in confidence, to COUNTRY RESIDENCES, Ltd., Grove House, London-road, Isleworth, Middlgsex.

FILING/RECORD CLERK Required for Architects' office. Similar experience an advantage. Holidays honoured. Salary by arrangement.—Box 5687, "The Builder."

BUILDERS' OFFICE MANAGER Required for small builder. House building and repair work, book-keeping, P.A.Y.E., Accounts and some ordering. State salary and experience. Essex/East London borders. Lady considered.—Box 5667, "The Builder."

OVERSEAS APPOINTMENTS

GHANA. Applications are invited from qualified ARCHITECTS to work in our Accra office. The work is varied, interesting and expanding, and the following vacancies require to be filled:—

1. SENIOR ARCHITECT, to be responsible for the architectural work of the office under the administrative management of a Senior Resident Engineer. Proposed tour up to 3 years with annual home leave. Salary (according to age and experience) £2,250-£2,500 with rent-free housing and car provided.
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3. ASSISTANT ARCHITECT, to be responsible for site supervision of two medium-sized building contracts and generally to assist the Senior Architect. Two-year tour with annual home leave. Salary £2,000-£2,250 with rent-free housing.

Apply in writing, not later than 12th June, to NORMAN & DAWBARN, Architects and Consulting Engineers, 7 Portland-place, London, W.1.

BUILDING FOREMAN

PERSIAN GULF—BAHRAIN

Thoroughly experienced active man.

Aged 30-40. Secondary School and apprenticeship; required immediately for local firm with important contracts.

Two years initial period subject to renewal. Inclusive remuneration £130 per month. Furnished bachelor accommodation. Passages paid.

Write giving age, full details experience and health to:

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Modular concrete

MODULAR CONCRETE COMPANY LTD

have vacancies for

SITE CLERKS

to cover important Modular contracts in the Staines area. Applicants must have experience of all aspects of site clerical duties including making up of bonus and wages sheets. A good basic salary will be paid and there is a bonus scheme with other staff benefits including superannuation. Written applications should be sent to Personnel Manager:

MODULAR CONCRETE COMPANY LTD.,
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BUILDERS' ESTIMATES accurately prepared from Bills of Quantities, plans and specifications. Prompt, efficient service.—VICTOR H. FERN, 21 Tettenhall-road, Wolverhampton. Telephone: Wolverhampton 24406-7.

QUALIFIED QUANTITY SURVEYORS with own Central London office offer assistance to the profession.—Tel: CHAncery 4246-7.

SPECIALIST SERVICES offered to the Building industry comprising preparation of Estimates, Buying and Piecework Schedules.—Details on request from WOOLGAR, KENT & ASSOCIATES, Estimating Surveyors, 51 High-street, Bridgwater, Somerset. Telephone: Bridgwater 3635.

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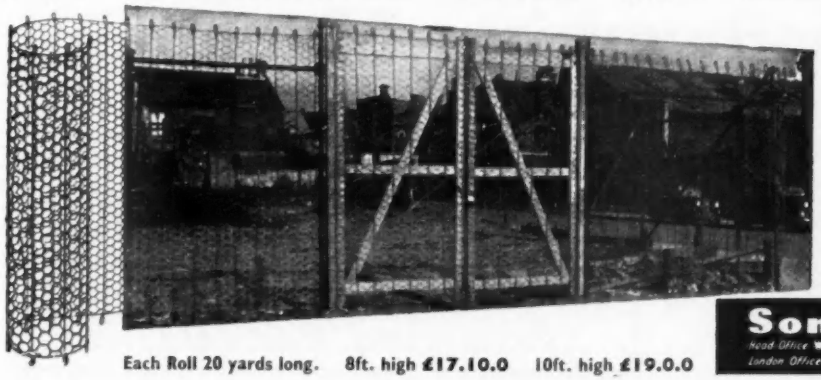

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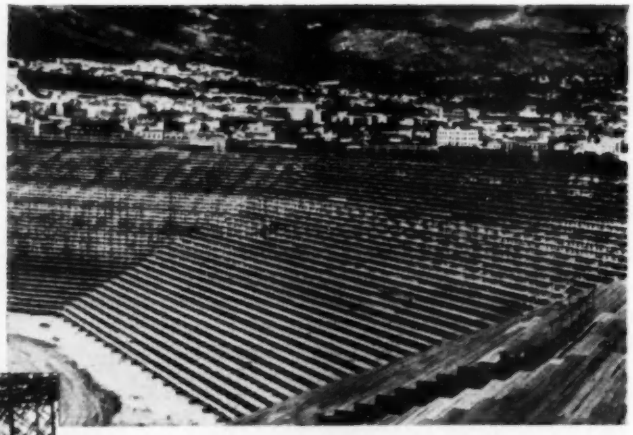

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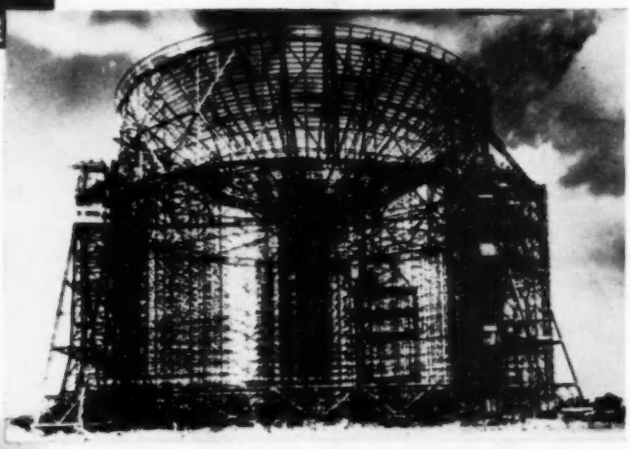

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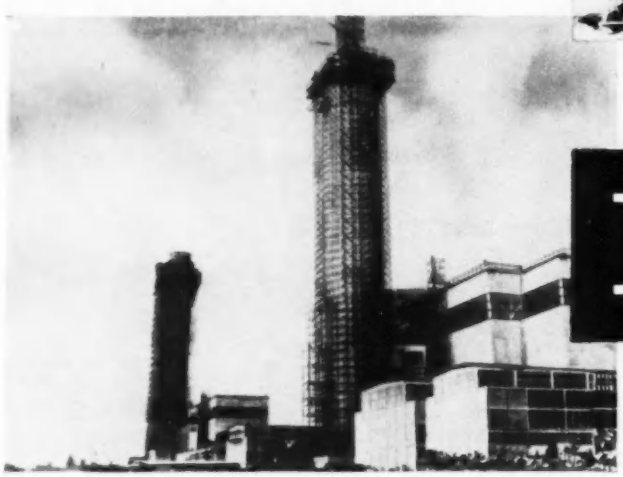

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